THE STATE OF THE DEATH PENALTY

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The death penalty is in decline in America and most death penalty states do not regularly impose death sentences. In 2016 and 2017, states reached modern lows in imposed death sentences, with just thirty-one defendants sentenced to death in 2016 and thirty-nine in 2017, as compared with over three hundred per year in the 1990s. In 2016, only thirteen states imposed death sentences, and in 2017, fourteen did so, although thirty-one states retain the death penalty. What explains this remarkable and quite unexpected trend? In this Article, we present new analysis of state-level legislative changes that might have been expected to impact death sentences. First, life without parole ("LWOP") statutes, now enacted in nearly every state, might have been expected to reduce death sentences because they give jurors a noncapital option at trial. Second, legislatures have moved, albeit at varying paces, to comply with the Supreme Court's holding in Ring v. Arizona, which requires that the final decision in capital sentencing be made not by a judge, but by a jury. Third, states at different times have created statewide public defender offices to represent capital defendants at trial. In addition, the decline in homicides and homicide rates could be expected to contribute to the decline in state-level death sentencing. We find that contrary to the expectations of many observers, changes in the law such as adoption of LWOP and jury sentencing, did not consistently or significantly impact death sentencing. The decline in homicides and homicide rates is correlated with changes in death sentencing at the state level. However, this Article finds that state provision of capital trial representation is far more strongly and robustly correlated with reduced death sentencing than these other factors. The findings bolster the argument that adequacy of counsel has greater implications for the administration of the death penalty than other legal factors. These findings also have implications beyond the death penalty and they underscore the importance of a structural understanding of the Sixth Amendment right to counsel in our system of criminal justice.

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INTRODUCTION

Use of capital punishment is declining in America. Death sentencing has fallen to a modern low and executions are increasingly rare.¹ While nineteen states have abolished the punishment, that is not a good explanation for this steep decline, since none were states that had imposed death sentences in large numbers.² What explains this decline? While scholars and journalists have increasingly commented on this decline and speculated as to

¹ The United States imposed fewer than one hundred death sentences and executed fewer than fifty prisoners annually since 2011, representing the lowest yearly totals since 1976. *See* TRACY L. SNELL, BUREAU OF JUSTICE STATISTICS, U.S. DEP'T OF JUSTICE, CAPITAL PUNISHMENT, 2013—STATISTICAL TABLES 14 tbl.11, 19 tbl.16 (Dec. 2014) https://www.bjs.gov/content/pub/pdf/cp13st.pdf. For data concerning death sentencing from 1990 through 2017, see *Data on Death Sentencing*, END OF ITS ROPE, http://endofitsrope. com/ (last visited Dec. 21, 2018).

² This Article examines data from the years 1979 to 2016. See *infra* Appendix A for changes in the legality of capital punishment by state.

what might be causing it,³ empirical research has just begun to examine the question.⁴ A recent book comprehensively analyzes the great American death penalty decline,⁵ and it relies on the research presented for the first time in this Article tackling a central question: why some states have experienced greater declines in death sentences than others.

To analyze the state of the death penalty in decline, we focus on three types of legal changes that many suspected might affect death sentencings and focus on a defense-lawyering effect—the strong impact that the creation of state-level capital defense offices has on reducing death sentencing. We conclude by discussing implications of these findings for Eighth Amendment arbitrariness claims, Sixth Amendment right to counsel arguments, and criminal justice reform conversations more broadly.

The American death penalty today produces the fewest death sentences seen in over three decades. In 2016, thirty-one defendants were sentenced to death and in 2017, thirty-nine defendants were sentenced to death.⁶ In contrast, in the 1990s, several hundred people were sentenced to death each year. In 2016, only thirteen states imposed death sentences and in 2017,

4 See Brandon L. Garrett, End of Its Rope: How Killing the Death Penalty Can REVIVE CRIMINAL JUSTICE (2017) (presenting statistical analysis of death sentencing from 1973 to 2016 and citing to the research presented here) [hereinafter GARRETT, END OF ITS ROPE]; Brandon L. Garrett, The Decline of the Virginia (and American) Death Penalty, 105 GEO. L.J. 661 (2017) (analyzing the decline in Virginia death sentences) [hereinafter Garrett, The Decline of the Virginia (and American) Death Penalty]; Lee Kovarsky, Muscle Memory and the Local Concentration of Capital Punishment, 66 DUKE L.J. 259 (2016) (examining county-level concentration of death sentences); David McCord & Talia Roitberg Harmon, Lethal Rejection: An Empirical Analysis of the Astonishing Plunge in Death Sentences in the United States from Their Post-Furman Peak, 81 ALB. L. REV. 1 (2018) (examining death sentences and capitaleligible homicides in three years each a decade apart); Robert J. Smith, The Geography of the Death Penalty and Its Ramifications, 92 B.U. L. REV. 227, 265-75 (2012) (examining countylevel death sentencing from 2004 to 2009).

5 See GARRETT, END OF ITS ROPE, supra note 4, at 79-105; see also Data on Death Sentencing, supra note 1 (data resource website accompanying book). Chapter four discusses in a summary fashion the findings presented in this Article. This Article provides complete findings and description of the underlying empirical research, as well as substantial new statistical analyses.

See, e.g., DAVID GARLAND, PECULIAR INSTITUTION: AMERICA'S DEATH PENALTY IN AN 3 AGE OF ABOLITION (2010); Richard C. Dieter, The Future of the Death Penalty in the United States, 49 U. RICH. L. REV. 921, 925 (2015); Carol S. Steiker & Jordan M. Steiker, Entrenchment and/or Destabilization? Reflections on (Another) Two Decades of Constitutional Regulation of Capital Punishment, 30 LAW & INEQ. 211, 212, 240 (2012); Scott E. Sundby, The Death Penalty's Future: Charting the Crosscurrents of Declining Death Sentences and the McVeigh Factor, 84 TEX. L. REV. 1929, 1932-56 (2006); Emily Bazelon, Where the Death Penalty Still Lives, N.Y. TIMES MAG. (Aug. 23, 2016), https://www.nytimes.com/2016/08/28/magazine/where-thedeath-penalty-still-lives.html; Matt Ford, The Death Penalty Becomes Rare, ATLANTIC (Apr. 21, 2015), https://www.theatlantic.com/politics/archive/2015/04/the-death-penaltybecomes-unusual/390867/.

⁶ DEATH PENALTY INFO. CTR., THE DEATH PENALTY IN 2017: YEAR END REPORT 2 (2017), https://deathpenaltyinfo.org/YearEnd2017; Death Sentences in 2016, DEATH PENALTY INFO. CTR., https://deathpenaltyinfo.org/2016-sentencing (last visited Dec. 21, 2018).

fourteen states did so, although thirty-one states retain the death penalty as a legal option. Virginia, which is third only to Texas and Oklahoma in the number of executions in the modern era, has imposed no death sentences since 2011.⁷ In the past few years, Texas has imposed only a handful of death sentences annually. As Carol Steiker and Jordan Steiker have explained: there are abolitionist states; but also "de facto or virtually abolitionist states," which retain the death penalty but rarely impose it (like Colorado); "symbolic states," which impose many death sentences but do not conduct executions (like California); and "executing states" (like Texas), which irregularly impose death sentences and carry out executions.⁸ The resulting uneven decline makes the trend in modern American death sentencing complex and a subject in need of empirical study.

One trend that might explain that striking decline in death sentences is the national decline in murder rates in the United States since the mid-1990s. We find a significant effect of the decline in homicides on death sentences, but an effect that is highly inconsistent across states. For example, Texas experienced a sharp drop in capital sentencing as the number of murders fell.9 However, murders fell even faster in California, and death sentencing remained relatively high.¹⁰ In a separate work, we find that declining murder rates more strongly correlate with death sentencing at the county, rather than the state level.¹¹ However, at that county level, other factors, such as the race of the victims of homicide and inertia within counties, more strongly predict death sentencing.¹² Although county-level practices, like the preferences of prosecutors, may strongly impact death sentencing, changes at the state level can also be expected to affect death sentencing. After all, states regulate the death penalty through adoption of legislation defining death-eligible offenses and the procedures for capital trials; states maintain the death row, states conduct executions, and states may subsidize---if not fund---the defense and prosecution of capital cases.¹³

In this Article, we examine three key state-law changes relating to the death penalty that might be expected to contribute to the uneven state of the American death penalty: (1) the enactment of life without parole ("LWOP") statutes for capital murder, (2) the requirement of a jury determination on the presence of an aggravating factor, and (3) the establishment of state systems of capital representation. Each of these types of state legal changes

11 See Brandon L. Garrett et al., The American Death Penalty Decline, 107 J. CRIM. L. & CRIMINOLOGY 561 (2017).

12 See id.

13 See Deborah W. Denno, *Courting Abolition*, 130 HARV. L. REV. 1827, 1830–39 (2017) (reviewing STEIKER & STEIKER, *supra* note 8) (describing "uneven state practice" and state procedures that can express "resistance or receptivity" to death sentencing).

⁷ See Garrett, The Decline of the Virginia (and American) Death Penalty, supra note 4, 670–71.

⁸ CAROL S. STEIKER & JORDAN M. STEIKER, COURTING DEATH: THE SUPREME COURT AND CAPITAL PUNISHMENT 118 (2016).

⁹ See GARRETT, END OF ITS ROPE, supra note 4, at 89.

¹⁰ Id. at 8.

were ones that many observers expected to impact death sentences. These changes were made at different times in different states, so they could be examined using statistical models and regressions, controlling for "fixed effects" or other state-specific factors.

First, a possible explanation for the decline in death sentencing may be the rise of an alternative sentence: life without parole. Nearly every state has introduced a life without parole sentencing option, often making noncapital defendants and even nonmurderers eligible for true life in prison.¹⁴ LWOP adoption has been supported by both tough-on-crime conservatives, who sought to end parole, and death penalty abolitionists, who hoped that jurors would prefer not to impose death if a satisfactory alternative is available.¹⁵ Many assumed that if the jury is given the choice whether to sentence a person to death or LWOP, that more jurors would take advantage of a nondeath sentence certain not to result in release.¹⁶ LWOP "provides assurance to juries and victims' family members that perpetrators will not be set free."¹⁷

Second, another important possible factor is state legislation requiring that the jury and not a judge make the decision whether to sentence a person to death. The Supreme Court held in its 2002 *Ring v. Arizona* decision that capital sentences imposed by judges violate the defendant's Sixth Amendment right to a trial by jury.¹⁸ Some but not all states had already adopted such a procedure, and some states were slow to comply with this ruling,¹⁹ recently prompting the Court to reaffirm its stance.²⁰ Some observers wondered whether this change might impact states where elected judges might have incentives to aggressively impose death sentences.²¹

Third, reduced death sentencing may be attributed to improved representation of capital defendants—a defense-lawyering effect. Capital defense in America is almost always indigent defense, and it demands far greater

17 Dieter, *supra* note 3, at 925 ("Other probable reasons for the decline in the use of the death penalty are the emergence of the alternative punishment of LWOP and the drop in the number of murders nationwide.").

18 Ring v. Arizona, 536 U.S. 584, 609 (2002).

19 See infra Appendix A, Table 3 for a complete review of state regimes at the final stage of capital sentencing.

20 See Hurst v. Florida, 136 S. Ct. 616, 621 (2016).

21 See Daren S. Koudele, Comment, Unraveling Ring v. Arizona: Balancing Judicial Sentencing Enhancements with the Sixth Amendment in Capital Punishment Schemes, 106 W. VA. L. REV. 843, 845–46 (2004) (arguing that "strong consideration" in explaining the decline in death sentences should be given to Ring v. Arizona and also Atkins v. Virginia).

¹⁴ See *infra* Appendix B for the year of life without parole statute enactment by state; *see also* MARGARET E. LEIGEY, THE FORGOTTEN MEN: SERVING A LIFE WITHOUT PAROLE SENTENCE 3 (2015).

¹⁵ For a description of these political dynamics, see GARRETT, END OF ITS ROPE, *supra* note 4, at 79–105.

¹⁶ See, e.g., David McCord, What's Messing with Texas Death Sentences?, 43 TEX. TECH L. REV. 601, 612 (2011) (discussing speculation that LWOP might explain the Texas decline and rejecting that explanation); see also GARRETT, END OF ITS ROPE, supra note 4, at 79–105.

knowledge, skill, and effort on the part of an attorney.²² Since 1932, the Supreme Court has required a court-appointed lawyer for any indigent defendant charged with a capital crime,²³ and the Court has affirmed that the Sixth Amendment requires some minimal level of investigation of mitigating evidence that might provide the jury with a reason not to sentence a person to death.²⁴ But achieving widespread competent defense is an "enormous social task,"25 as Anthony Lewis observed in the wake of Gideon v. Wainwright.²⁶ Claims regarding ineffective assistance of counsel have long been the most common reason why death sentences are reversed during postconviction proceedings. The American Bar Association has documented inadequate resources for capital defense in death penalty states, and it has highlighted the need for a "responsible agency" to ensure statewide quality in capital representation.²⁷ Some states created such offices; they are more effective and they can also be less expensive than appointed lawyers on a case-by-case basis. Other states have not done so, although more states have done so over time.²⁸ In this Article, we find that legislation creating state offices for capital defense has strongly and robustly contributed to the reduction in death sentencing. States like Virginia and North Carolina that created such offices experienced steeper declines in death sentencing once they did so. States like California and Florida that continue to rely largely on court-appointed lawyers in capital trials have maintained death sentencing at a comparatively higher rate.

24 See, e.g., Rompilla v. Beard, 545 U.S. 374, 393 (2005) (requiring reasonable investigation even when no mitigating evidence believed to exist); Wiggins v. Smith, 539 U.S. 510, 534 (2003) (mandating reasonable investigation as an element of effective assistance of counsel); Williams v. Taylor, 529 U.S. 362, 399 (2000) (reversing unsuccessful capital appeal based on ineffective assistance of counsel).

25 ANTHONY LEWIS, GIDEON'S TRUMPET: How ONE MAN, A POOR PRISONER, TOOK HIS CASE TO THE SUPREME COURT—AND CHANGED THE LAW OF THE UNITED STATES 215 (1964) (describing intense state commitment required to pursue "the dream of a vast, diverse country in which every man charged with crime will be capably defended, no matter what his economic circumstances, and in which the lawyer representing him will do so proudly").

26 372 U.S. 335, 345 (1963) (requiring effective assistance of counsel for all indigent criminal defendants).

27 AM. BAR ASS'N, EVALUATING FAIRNESS AND ACCURACY IN STATE DEATH PENALTY SYSTEMS: THE ALABAMA DEATH PENALTY ASSESSMENT REPORT, at iii, xiii (2006), https://www.americanbar.org/content/dam/aba/migrated/moratorium/assessmentproject/ala bama/report.authcheckdam.pdf.

28 See GARRETT, END OF ITS ROPE, supra note 4, at 111-12.

²² *See About Us*, OFFICE ST. PUB. DEFENDER, http://www.ospd.ca.gov/about-us/ (last visited Jan. 16, 2016). California made one of the first major efforts to organize a state-level capital defender by legislation that transitioned the Office of the State Public Defender into a specialized capital defense office, primarily in recognition of the disproportionate appellate caseload precipitated by a growing death row population. *Id.*

²³ See Powell v. Alabama, 287 U.S. 45, 72-73 (1932).

Call it a "defense-lawyering effect."²⁹ We find that this defense-lawyering effect of creating state-level capital trial offices was more than twice as strong as the effect of adopting LWOP. Our empirical modeling shows that the introduction of LWOP sentencing is associated with fewer capital sentences, but that the extent of reduced sentencing is small. We found that the defense-lawyering effect was a much more consistent effect than any state-wide effect of murder rates. We found that compliance with *Ring v. Arizona*, the Supreme Court decision that requires a jury decision at sentencing in a death penalty case,³⁰ showed erratic coefficients, suggesting the impact was not statistically sound (and further analysis showed that a few states accounted for any apparent effect).³¹ In sum, changes in state law did not consistently impact state-level death sentencing. Changes in resources for defense lawyering did.

These results help to explain the remarkable trend in the imposition of the ultimate punishment over the past two decades: the American death penalty decline. These results also suggest the both practical and constitutional implications of the decline. Both scholarly and judicial opinions have differed in the past as to the implications of the decline in capital punishment. In his dissenting opinion in *Glossip v. Gross* in 2014, Justice Stephen Breyer concluded the death penalty may now be unconstitutional, noting "dramatic declines" in death sentences even in states like Texas and Virginia.³² Justice Antonin Scalia countered in a concurring opinion that fewer death sentences show the system is working and the Court has been wrong to support "proliferation of labyrinthine restrictions on capital punishment.³³

We suggest that both perspectives are missing an important part of the story. The decline does have to do with the system working better, but not the system that Justice Scalia had in mind. The Supreme Court's rules on capital punishment, while modestly requiring some minimal effort dedicated to investigating mitigation evidence in death penalty trials, has never required that there be any minimal amount of resources for death penalty cases. The Court has never suggested that states need to create offices to handle capital cases (while the America Bar Association has, the Court has never explicitly ratified that recommendation). The defense-lawyering effect does not come from the Supreme Court, but from state-level innovations. We describe how the emergence of team-defense strategies in capital trial offices may have improved the effectiveness of those offices, even given limited resources.

That these changes may have played an outsized role in the death penalty decline suggest that indigent defense plays an underappreciated role in criminal justice more generally. Indigent defense resources are lacking in many states, where the situation has long been dire. If cases outside of capi-

²⁹ Id.

³⁰ Ring v. Arizona, 536 U.S. 584 (2002).

³¹ For further discussion of these findings, see *infra* Part II.

³² Glossip v. Gross, 135 S. Ct. 2726, 2775 (2015) (Breyer, J., dissenting).

³³ Id. at 2749 (Scalia, J., concurring).

tal cases obtained team-defense resources to hire social workers and conduct better factual investigations, the results could have a dramatic impact on the quality and fairness of criminal justice. These findings could influence lawmakers considering indigent defense budgeting, although the lack of budgeting has been endemic. These findings also suggest that courts should do far more to attend to the Sixth Amendment right to counsel issues raised in death penalty cases as well as in noncapital cases. If the system was working and all death penalty cases received minimally adequate counsel, we might see a far steeper decline in death sentencing in this country—and perhaps in criminal punishment more broadly.

In Part I, we explore how the statistical understanding of the death penalty has changed, describe studies that have examined state-level effects on death sentencing, and present a new model of the death penalty decline. Part II evaluates the impact of each type of state legislation in detail. In Part III, we discuss the implications of the empirical findings. The powerful role of state-level representation in reduced sentencing supports a continued emphasis on the Sixth Amendment right to counsel in capital trials and invites litigators challenging the death penalty to take advantage of techniques developed by capital defenders. Finally, to the extent that doctrine, federalism-based, and practical concerns preclude the Supreme Court from actively promoting state provision of capital defense under existing Sixth Amendment doctrine, this Article argues that remarkable gains in the fairness and effectiveness of capital punishment could result from state policy reform.

I. STATE DEATH SENTENCING PATTERNS

A. Prior Research on State Death Sentencing

There is a substantial body of empirical work studying death sentencing, and for several decades, scholars have studied both state and local death sentencing patterns. The American death penalty has always been dominated by the practices of the most active death sentencing jurisdictions. Figure 1 shows how three states, California, Florida, and Texas, play an outsized role (and constitute a growing share) of death sentencing.

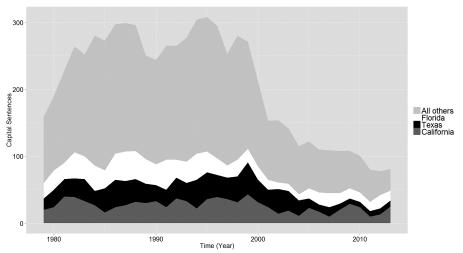


FIGURE 1: CAPITAL SENTENCING NATIONALLY, 1979–2013, SEGMENTED BY STATE

Many of the classic studies of death sentencing have focused on single states. For example, the study of death sentencing in Georgia from 1974 through 1979, led by David C. Baldus, examined factors influencing death sentencing, and found that race discrimination played a substantial role.³⁴ Over time, researchers studied sentencing patterns in groups of death penalty states and then the sentencing patterns across all death penalty states.³⁵ The "Broken System" studies led by James Liebman, Valerie West, and Jeffrey Fagan examined death sentences from 1973 through the early 1990s.³⁶ That work focused on state-level practices affecting death sentencing, including reversal rates by state appellate and postconviction courts, but also county-level patterns in death sentencing.³⁷ That research has been updated. A study by Robert J. Smith of death sentences between 2004 and 2009 found increased "clustering around a narrow band of counties."³⁸ In a prior project, these authors, along with Alexander Jakubow, studied county-level death

³⁴ DAVID C. BALDUS ET AL., EQUAL JUSTICE AND THE DEATH PENALTY 268 n.31 (1990).

³⁵ Id. For subsequent research, see U.S. GEN. ACCT. OFF., GAO/GGD-90-57, DEATH PENALTY SENTENCING: RESEARCH INDICATES PATTERN OF RACIAL DISPARITIES (1990); Catherine M. Grosso et al., *Race Discrimination and the Death Penalty: An Empirical and Legal Overview, in* AMERICA'S EXPERIMENT WITH CAPITAL PUNISHMENT 525, 525 (James R. Acker et al. eds., 3d ed. 2014).

³⁶ James S. Liebman & Peter Clarke, *Minority Practice, Majority's Burden: The Death Penalty Today*, 9 OHIO ST. J. CRIM. L. 255, 299 (2011); James S. Liebman et al., *A Broken System: Error Rates in Capital Cases, 1973–1995* (Columbia Law Sch. Pub. Law & Legal Theory Working Paper Grp., Paper No. 15, 2000), https://papers.ssrn.com/sol3/papers.cfm?abstract _id=232712.

³⁷ Liebman & Clarke, *supra* note 36, at 264; *see also* Andrew Gelman et al., *A Broken System: The Persistent Patterns of Reversals of Death Sentences in the United States*, 1 J. EMPIRICAL LEGAL STUD. 209, 247 (2004).

³⁸ Smith, supra note 4, at 228.

sentencing from 1990 to 2015, and examined correlations between death sentencing and murder rates, race of victim, past death sentencing, and county demographics.³⁹

Several studies have examined some, although not all, of the state-level factors that we focus on in this Article. Two studies have used empirical techniques to examine individual legislative changes of the type that we study in this Article. One study, focusing just on Delaware, found that increased death sentencing in that state might be attributable to the judge's ability to impose death sentences (and not the jury).⁴⁰ A second piece, a student note, suggested that life without parole statutes do not reduce death sentencing.⁴¹ In addition, prior work has examined the connection between murder rates and death sentencing. Researchers have found that there were strong correlations between the number of murders, murder rates, and death sentences in a state, at least during the earlier time period during which death sentences were increasing each year.⁴² This Article looks at death sentencing from the entire United States over thirty-seven years, from 1979 to 2016, which includes the time period in which death sentencing steadily rose and the period in which death sentencing began to fall, and it looks at a larger set of state-level factors.

B. Data Sources

This Article incorporates data collected from government records concerning homicide, state legislative history, and death row populations, as well as data that we coded on state legislation and indigent capital defense resources. The data examined includes: (1) death sentencing data; (2) homicide data; (3) life without parole adoption; (4) judge versus jury capital sentencing; and (5) state-level capital defense regimes. This Section describes each data source in turn.

1. Death Sentencing Data

The primary dependent variable in the analysis is the number of death sentences in a given year in a given state, in the years 1979 through 2015. The Bureau of Justice Statistics (BJS) maintains data on the number of individuals sentenced to death each year in the United States.⁴³ These reports

43 Publications & Products: Capital Punishment, BUREAU JUST. STAT., http://www.bjs.gov/ index.cfm?ty=pbse&sid=1 (last visited Dec. 9, 2014).

³⁹ See Garrett et al., supra note 11.

⁴⁰ See, e.g., Sheri Lynn Johnson et al., The Delaware Death Penalty: An Empirical Study, 97 Iowa L. Rev. 1925, 1954 (2012).

⁴¹ Note, A Matter of Life and Death: The Effect of Life-Without-Parole Statutes on Capital Punishment, 119 HARV. L. REV. 1838, 1839 (2006).

⁴² See John Blume et al., Explaining Death Row's Population and Racial Composition, 1 J. EMPIRICAL LEGAL STUD 165, 174 (2004) (finding strong correlation between homicide and capital sentencing); Theodore Eisenberg, Death Sentence Rates and County Demographics: An Empirical Study, 90 CORNELL L. REV. 347, 347 (2005) ("The number of murders in a state largely determines the size of a state's death row.").

have been widely used in studies of the death penalty 44 and are considered the most accurate and comprehensive. 45

2. Homicide Data

Second, we examine state-level homicide data from 1979 through 2015. The Centers for Disease Control and Prevention ("CDC") mortality data, or the CDC WONDER database, is produced from mandatory submissions of death certificates to the National Vital Statistics System,⁴⁶ provides the most complete and reliable data on violent crime and homicide.⁴⁷ As a prominent source of public data on national health and mortality, the CDC also imposes confidentiality restrictions; where fewer than ten homicides occur in a county, entries are redacted.⁴⁸ Where multiple years' redaction makes reconstruction of CDC figures not possible, data is supplemented by the FBI's Uniform Crime Reporting Program ("UCR") data on homicides.⁴⁹ Comparison of these databases indicates that the UCR homicide data contains around eighty percent of murders reported by the CDC, and analysis shows neither geographical nor temporal bias in the differences between CDC and FBI figures.⁵⁰

45 *See* Blume et al., *supra* note 42, at 169 n.15 (describing discrepancies in the BJS data as "minimal").

46 Compressed Mortality File: Years 1968–1978 with ICD-8 Codes, 1979–1998 with IDC-9 Codes and 1999–2016 with ICD-10 Codes, CDC WONDER, http://wonder.cdc.gov/wonder/help/cmf.html, [hereinafter Compressed Mortality File] (last updated July 20, 2018).

47 The WONDER database includes indicators for observations where a low volume of homicide results in statistically crude estimates; these cautionary indicators provide helpful guidance in fashioning approaches to statistical analysis. Homicide rates, for example, can generally be used as a variable in modeling, as states with exceptionally low yearly murder figures tend to have abolished the death penalty in any case. Use of capital sentencing rates as a dependent variable, by contrast, makes small states like Delaware and Wyoming appear to be hundreds or thousands of times more important than Alabama or Texas, so the choice is best approached with caution.

48 See Compressed Mortality File, supra note 46.

49 Uniform Crime Reporting (UCR) Program, FBI, https://www.fbi.gov/about-us/cjis/ucr/ word (last visited Dec. 21, 2018).

50 Since data are supplemented primarily in small states that do not engage in the death penalty, disparities between sources of homicide data in this study have minimal impact. See *infra* Appendix B for a detailed comparison of homicide reporting by the FBI and the CDC.

⁴⁴ See, e.g., Blume et al., supra note 42, at 168; Johnson et al., supra note 40, at 1932–35; Liebman & Clarke, supra note 36, at 330 n.379, 337 n.41. In addition, the BJS data is altered from year to year, as BJS learns of additional information and revises its data. Compare TRACY L. SNELL, BUREAU OF JUSTICE STATISTICS, U.S. DEP'T OF JUSTICE, CAPITAL PUNISHMENT, 2012—STATISTICAL TABLES 19 tbl.16 (last updated Nov. 2014), with SNELL, supra note 1 (revising earlier data to state that 311 persons were sentenced to death in 1994, as compared with 315 in the earlier report). For more discussion, see McCord & Harmon, supra note 4, at 2 & n.3.

3. LWOP

During the time period from 1979 through 2015, we coded whether each state had an LWOP statute in effect.⁵¹ We coded in which year each statute was adopted.⁵² We sought to assess whether the availability of this alternative to the death penalty encouraged jurors to consider that sentencing option more often. We note, however, that in some states, judges were slow to instruct jurors on the availability of LWOP as an option, resulting in still additional litigation concerning the issue and a delay in any trial-level impact of LWOP adoption.

4. Judge Versus Jury Sentencing

We examined whether states had jury or judge sentencing in the years from 1979 through 2015.⁵³ In 2002, the Supreme Court's *Ring v. Arizona* decision required states to mandate a jury decision on the presence of an aggravating factor. Several states, however, did not immediately comply with the ruling, as Appendix A illustrates.⁵⁴ Florida, for example, did not comply until after 2016, when the Supreme Court struck down its statute in *Hurst v. Florida*.⁵⁵ In 2016, the Delaware Supreme Court found its death penalty statute unconstitutional following the ruling in *Hurst*.⁵⁶

5. Capital Defense Regimes

Finally, we collected data on whether states had state-level public defense offices to represent defendants in capital trials. In the 1970s and 1980s, most states that had the death penalty did not provide state-level offices to handle the defense in death penalty cases. Six states did so, and most were states like Connecticut that had few death sentences. Figure 2 illustrates capital defense resources by state in 1979.

⁵¹ In each year that a state legislature has made the sentencing option available for murder, this variable is recorded as a zero (0). In years when no LWOP option was available, the variable holds value one (1).

⁵² See *infra* Appendix A for a complete table of life without parole statute enactment years.

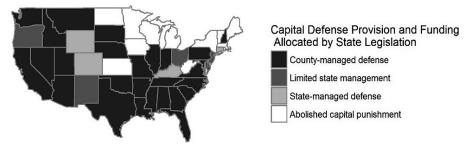
⁵³ This variable is recorded as zero (0) when a state's final decisionmaker in capital sentencing is a jury; when states fail to comply with *Ring* and the final decisionmaker is a judge, the variable is recorded as one (1).

⁵⁴ See also *infra* Section II.C for discussion of variations in the informal and legal standards imposed within some states.

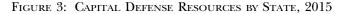
^{55 136} S. Ct. 616 (2016).

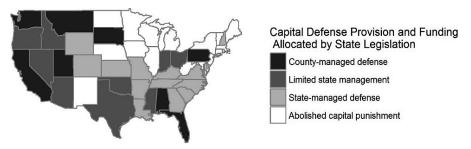
⁵⁶ See Rauf v. State, 145 A.3d 430 (Del. 2016) (en banc) (per curiam).





This began to change in the 1990s, when nine states had created such offices (including, for example, Missouri, Arkansas, and Tennessee), and more states provided some limited assistance at trial, even if not a lawyer from a state office. By 2015, almost all death penalty states provided state-level capital representation at trial, although as Figure 3 below illustrates, leading death penalty states, like Alabama and Florida, still do not have any trial resources at the state level for capital defense, and other key states, like Texas, do so only in what we code as limited resources.⁵⁷





This change was gradual, as it was not required by any Supreme Court decision or other legal obligation. Indeed, some states created these public defender offices not just to improve the quality of representation in capital cases and address potential constitutional concerns, but also as a cost-saving measure. In addition to coding whether states had a statewide office to provide capital representation, we also coded states that have implemented limited or partial measures, beyond simply stating guidelines for qualified

⁵⁷ We discuss these categories in more detail in the next part, but our criteria for including a state in the "limited" category are presence of two or more of the following: the state (i) provides trial-level funding in major dense regions or urban centers; (ii) mandates a significant hourly wage for capital defenders; (iii) provides statewide training resources for capital trial lawyers; or (iv) that counties have an arrangement for pooled capital defense resources. Appendix A, Table 5 details the coding regarding state-level capital defense.

defense attorneys.⁵⁸ We also use a simplified classification, which credits only states that clearly provide state-level representation to all capital defendants.

C. Empirical Strategy

To understand why death sentencing has declined far beyond levels predicted by trends in homicide, the effects of three state-level changes on capital sentencing—LWOP sentencing, jury sentencing, and state-level capital defense—are compared across several statistical models. First, traditional linear modeling provides a baseline for our examination of the impact of each legislative measure studied. The basic linear model is represented by the function:

Capital Sentences = Homicides + [Life without parole sentencing unavailable] + [No state-level capital defense provided] + [Judge authority in final sentencing phase]

That linear regression model, however, cannot capture the variability in characteristics of states, such as size and type of legal regimes. For that reason, we also conduct a fixed-effects regression model. The data we examine over time is panel data and segmented by state. We examine state fixed effects to control for any unobserved features that affect death sentencing at the state level. For example, the fixed effects model adjusts for the basic disparity between a state like Delaware, which despite its small size has imposed up to six death sentences in a single year, and Texas, which has imposed over twenty-five annual death sentences on average.⁵⁹

Third, we conduct a mixed-effects regression, which controls for both effects between states but also intrastate effects. Even nationally imposed decisions like *Ring v. Arizona* create effects that differ across the country,⁶⁰ justifying the use of both fixed- and random-effect modeling. Both fixed- and random-effects panel models also achieve a relatively high degree of fit.⁶¹ This model can help to control for broader factors that may spill across

61 Fixed-effects and mixed-effects models achieve a multiple *R*-squared value of approximately 0.791. Throughout the analysis, the apparent difference between fixed-

⁵⁸ See infra Appendix A, Table 5 (providing complete commentary on the coding decisions related to this variable). In states where capital representation is effectively provided by state attorneys specializing in capital defense, this variable is recorded as 0. In states that have implemented limited or partial measures to fund and set guidelines for representation in capital trials, the variable is recorded as 0.5. States may also be classified in this "limited" provision category where state attorneys represent clients only in certain counties. States are awarded a value of 1 for years in which there is no state-level capacity to represent defendants in capital trials, and court-appointed lawyers or local public defenders defend such trials.

⁵⁹ Delaware imposed six death sentences in 1993. See supra note 43.

⁶⁰ The Supreme Court's decision in *Ring* compelled Arizona to change procedure. Ring v. Arizona, 536 U.S. 584 (2002). Responses by other states must be treated individually. The factors driving state decisions on whether to comply with the *Ring* holding are explored in Section II.C.

state lines, such as national trends in public opinion, nationally imposed Supreme Court rulings, regional crime levels, and regional prosecution practices.

Fourth, we conducted a Poisson regression (as well as a negative binomial regression), which is useful to deemphasize very small and very large samples. Death sentencing is heavily concentrated in states like California, Florida, and Texas, and the Poisson regression focuses on the more midlevel states in the sample. This nonlinear model provides helpful clarity when modeling tightly packed dependent variables, such as capital sentencing rates. Any variable-specific modeling decisions are discussed in the relevant sections below.⁶²

Additional combinations of each statistical technique are made possible by variables that account for lag times in prosecution, measuring homicide in total volume or as a proportion of population, and other modeling choices. These choices are discussed further in Section II.B, and selected additional tables are provided in Appendix C.

II. FINDINGS: EXPLAINING THE DECLINE IN DEATH SENTENCING

In this Part, we describe the findings regarding the impact on death sentencing based upon four types of state-level changes: the decline in homicides and homicide rates; and three legal changes, (1) the enactment of LWOP statutes at the state level; (2) the requirement a jury determination at the final sentencing phase in compliance with the Supreme Court's ruling in *Ring v. Arizona*; and (3) the establishment of state systems of indigent capital defense representation. We found that the decline in homicides and homicide rates did not fully explain the decline in death sentences. Something else must be at work. We then ruled out two legal changes. We conclude in this Part that state provision of capital defense is the measure most strongly and robustly correlated with a decline in actual death sentences. In contrast to the effects observed regarding LWOP and jury sentencing, the "defenselawyering effect" was robust and consistently strong across models. In Part III, we turn to the implications of this finding for the future of death penalty and criminal justice practice.

effects and mixed-effects models is small. Erring on the side of caution, this Article follows the advice of Gelman and Hill to "always use multilevel modeling." ANDREW GELMAN & JENNIFER HILL, DATA ANALYSIS USING REGRESSION AND MULTILEVEL/HIERARCHICAL MODELS 246 (2007).

⁶² For example, the abolition of the death penalty in many states during this period of analysis allows for two general approaches: One option is the creation of a dummy variable that holds the numeric value of homicides where the death penalty is available, and holds 0 where it is not. A simpler approach is merely to exclude observations from years when the death penalty is unavailable. Either approach yields the same interpretive conclusions; results are displayed in terms of the latter approach.

A. Overview of Findings

Table 1 displayed below summarizes the main findings of our analysis, using a simple model which omits abolitionist states in years in which a given state did not have the death penalty legally available. The table compares the regression results, using each of the four models described in Part I, examining the role played by the introduction of life without parole sentencing, judge versus jury sentencing, creation of state-level indigent defense for capital cases, and total numbers of homicides, in four models.

		,			
	Ordinary	Panel model	"Mixed	Poisson	Negative
	least	controlling	effects"	regression	binomial
	squares	for fixed	model	model	model
	(linear)	effects	controlling		
	regression	within states	for both		
			fixed and		
			random		
			effects		
No state-	3.333*	4.005**	4.033**	1.089**	0.992**
level capital	(1.77)	(0.49)	(0.47)	(0.04)	(0.08)
defense					
provided					
Jury not	0.693	1.674**	1.568**	0.349**	0.176*
fully	(1.76)	(<i>0.33</i>)	(0.31)	(0.03)	(0.06)
informed of	. ,		· · ·	. ,	
life without					
parole					
sentencing					
Judge	3.288	0.439	0.713*	0.395**	0.335**
authority in	(1.71)	(<i>0.53</i>)	(0.50)	(0.03)	(0.07)
final	. ,	. ,		. ,	. /
sentencing					
phase					
	tes significan	ce at 0.1 level.	** Indicates sig	onificance at	0.001 level.

TABLE 1:	REGRESSION ANALYSIS OF STATE DEATH SENTENCING AND	Homicide
	TOTALS, 1979–2015	

Note: * *Indicates significance at 0.1 level.* ** *Indicates significance at 0.001 level. Standard errors in parentheses.*

Modeling shows that LWOP statutes are associated with reduced sentencing but with a small effects size, when controlling for total homicides in each state. The provision of state-level capital defense exhibits correlation with a decline in sentencing that is both strong and robust. Compliance with *Ring v. Arizona*, by mandating a jury decision at the final phase of sentencing, exhibits weak correlation and a high probability threshold at which the null hypothesis cannot be rejected, suggesting the impact of this measure on death sentencing is not statistically sound; further analysis described below indicates that a small number of states disproportionately contribute to the effects observed.⁶³ The Sections that follow explain these finding in more detail.

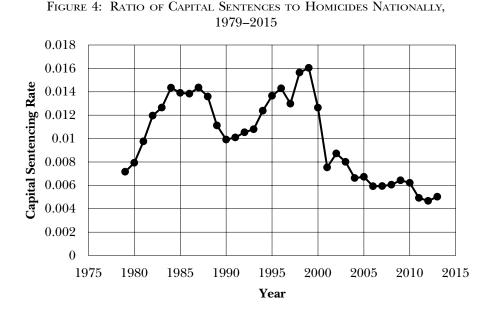
B. Homicide and Capital Sentencing

We sought to explore whether the decline in death sentencing is attributable simply to the national decline in homicides, which has affected each of the death penalty states, and which began in the mid-1990s, not long before death sentencing similarly began to fall. Studies in the past have found a close relationship between capital sentencing and homicide rates, suggesting that at least in some death penalty states, a stable percentage of homicide prosecutions reliably resulted in the death penalty.⁶⁴ However, we observe that homicides and death sentences have become increasingly decoupled. As shown at a national level in Figure 4, the United States imposed eight capital sentences per thousand murders in the years following Supreme Court reinstatement of the death penalty. By 1999, this figure had climbed to sixteen death sentences per thousand murders. Between 2000 and 2011, however, the capital sentencing rate fell to fewer than five sentences per thousand murders. The reduction in homicides since 2000 has been steady, and it has resulted in a decline of ten percent.⁶⁵ In the same period, however, capital sentencing has fallen by more than sixty percent.

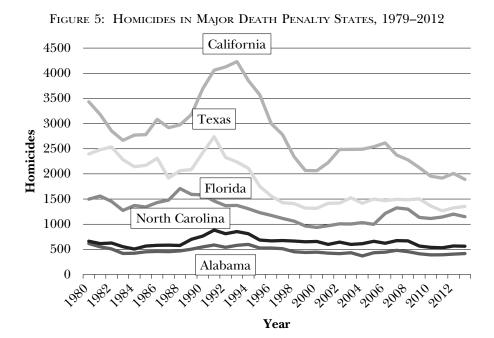
65 *See infra* Appendix B, Figure 7 (illustrating CDC and FBI measures of homicide). CDC figures indicate a decline from 16,765 homicides in 2000, to 16,241 in 2011, a reduction of around three percent. Estimates by reporting agencies vary.

⁶³ See *infra* Section II.E for further argument that *Ring* compliance shows no clear effect on sentencing.

⁶⁴ See, e.g., Blume et al. supra note 42, at 174 (finding strong correlation between homicide and capital sentencing); Eisenberg, supra note 42, at 347 ("The number of murders in a state largely determines the size of a state's death row."); Stephen F. Smith, Has the "Machinery of Death" Become a Clunker?, 49 U. RICH. L. REV. 845, 860 (2015) (arguing that "[t]he strongest alternative explanation for recent declines in the death penalty involves crime rates"). But see Steiker & Steiker, supra note 3, at 212 (attributing declines in death sentencing in part to noncrime factors, including changing legal regimes surrounding the penalty). Recent trends force reconsideration of the role of homicide as a predictive variable.



Examined at a state level, one can see how the decline in homicides affected the top death sentencing states, but not in equally dramatic fashion. Figure 5 illustrates the trends in homicide among the top five states, ranked by imposition of death sentences. These five states account for nearly half of all national death sentencing since 1980.



e states. Figure 5 suggests that ch

Among these states, Figure 5 suggests that changes in homicide are not producing uniform effects on the death penalty. Florida and Alabama have both seen a relatively gradual reduction in murders. Meanwhile, California enjoyed the greatest drop in homicides in the country. Yet each state continues sentencing criminals to death regularly—indeed, these three states alone have contributed more than half of the nation's recent death sentences.⁶⁶ Complicating any relationship between homicides and death sentences, not all murders are death eligible, so one would not expect changes in murder rates to necessarily correspond to changes in death sentencing patterns. In many states, however, the death-eligibility criteria include quite vague standards⁶⁷ that can potentially sweep in many or even most murders.⁶⁸

Homicide measures also play a key role in further statistical analysis. We employed a number of models for the analysis underlying this Article.⁶⁹ In county-level research on death sentencing, for example, one important analysis was to examine whether homicide rates are more closely related to death sentencing when one lags homicide rates by one year.⁷⁰ That is because it

68 See Jeffrey Fagan et al., Capital Punishment and Capital Murder: Market Share and the Deterrent Effects of the Death Penalty, 84 Tex. L. Rev. 1803, 1821 (2006) (finding national death eligibility rate of twenty-five percent based on FBI Supplementary Homicide Reports data and slightly lower twenty-one percent Texas rate); Justin Marceau et al., Death Eligibility in Colorado: Many Are Called, Few Are Chosen, 84 U. COLO. L. Rev. 1069, 1107 (2013) (studying Colorado homicides from 1999 to 2010 and finding ninety percent death eligible); see also Raymond Paternoster et al., Justice by Geography and Race: The Administration of the Death Penalty in Maryland, 1978–1999, 4 U. MD. L.J. ON RACE, RELIGION, GENDER & CLASS 1, 18 (2004) (finding twenty-one percent death-eligibility rate in Maryland); Steven F. Shatz & Nina Rivkind, The California Death Penalty Scheme: Requiem for Furman ?, 72 N.Y.U. L. Rev. 1283, 1332 (1997) (finding eighty-four percent death eligibility rate in California).

69 Briefly summarized, we analyzed thirty-seven years of capital sentencing and state legislative history data in the following variations: lagging murders as against LWOP adoption; lagging murders against each independent variable (Appendix C, Tables 6 & 7); including a time gap between each independent variable and capital sentencing figures; measuring actual homicide figures as well as homicide rates (Appendix C, Table 8); and including a dummy variable to represent abolitionist states, creating an overdispersed dataset to which we applied negative binomial regressions (Appendix C, Table 10). Although space limitations prevent us from presenting each combination, a selection of models is presented in the Appendix, illustrating the robust and high correlation coefficients associated with state-level capital sentencing at strong confidence intervals. Allocating sentencing authority to a judge or jury has lower correlation coefficients in the panel models, and uniformly low significance. We also observe a lack of significance for life without parole adoption in key models, including those using lagged homicide rates (Appendix C, Table 8) and the negative binomial model (Appendix C, Table 10).

70 See Garrett et al., supra note 11, at 597–99 (analyzing lagged county-level homicide data).

⁶⁶ In 2013, California, Florida, and Alabama contributed forty-five capital sentences to a total of eighty-one, nationally. California alone imposed twenty-five capital sentences. *See* SNELL, *supra* note 1, at 9 tbl.4.

⁶⁷ *See, e.g.*, VA. CODE ANN. § 19.2-264.4(C) (West 2018) ("[C] onduct in committing the offense was outrageously or wantonly vile, horrible or inhuman, in that it involved torture, depravity of mind or aggravated battery to the victim.").

can take time for a case to proceed to a trial. By contrast, an unlagged model reflects the view that decisionmakers in the capital sentencing process are acutely aware of contemporary murder figures and base their decisions in part on that awareness. (This is almost certainly true of some prosecutors, and may to a lesser degree be true of judges, who exert substantial influence even in the majority of states where they lack formal death sentencing authority, and of juries.) The contrasting viewpoints also inform whether to measure homicide rates against state populations, or against national trends.⁷¹ Across models, we consistently find that state-level capital defense is strongly correlated with sentencing. Results are presented using a model that associates homicides figures with the actual capital sentences in the same year, and additional models are presented in Appendix C.

C. State Adoption of Life Without Parole

Many observers of the modern American death penalty decline have speculated that state adoption of LWOP might explain the drop in death sentencing. However, we found that state adoption of life without parole reduces death sentencing inconsistently across models, and the extent of change is small where it is observed. This Section describes the results of regression modeling and, by exploring the history of parole and the development of true life imprisonment options, describes why there might be this observed weak effect of life without parole sentencing on death sentencing.

The statistical significance of the relationship between LWOP sentencing options and capital punishment is supported by two key indicators. The models exhibit moderate standard error values; furthermore, the Poisson model and both panel models reject the null hypothesis at a very small 0.001 level. The estimated impact of LWOP introduction is small; introducing life without parole reduces capital sentencing between fifty percent and seventy percent less effectively than the provision of state-level capital defense. The Poisson regression model suggests a far smaller comparative effect of LWOP sentencing, suggesting that the observed effects largely come from either very small or large jurisdictions. By its nature, the Poisson model amplifies the effect of moderately sized states, and examination of individual states bears out this pattern. Negative binomial regression results further highlight the

⁷¹ Contributors have also suggested incorporating a multiyear lag, on the logic that decisionmakers react to longer term trends rather than instant figures in murder rates. Our analysis expresses no preference between models; as we observe the same results from each, results are presented using the models that display the greatest degree of overall fit. While the ground-level fact that capital murders take significant time to prosecute is compelling, other scholars have cast doubt on the view that some portion of murderers will inevitably face capital trial. The often vague standards for capital eligibility, as observed above, *see supra* note 67, have inspired the comment that "virtually any murder case is a death-eligible case with a little creativity on the part of the prosecutor." *Race and the Death Penalty* (C-SPAN television broadcast Mar. 19, 2007), https://www.c-span.org/video/?197237-1/race-death-penalty (statement of Stephen B. Bright).

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lack of any consistent connection between LWOP adoption and death sentencing.

The enactment of LWOP statutes is most strongly associated with reduced sentencing in three states with large death row populations: Florida, Ohio, and Oklahoma. By contrast, Missouri and Louisiana, states that engage in capital punishment more moderately, exhibit the lowest overall effects of LWOP on death sentencing.⁷² Or take Texas: Texas adopted life without parole quite late, in fall 2005, and death sentencing had already begun to decline at that time, and it continued to do so largely to the same degree after LWOP was adopted.⁷³ Or contrast Virginia, where death sentences went up for almost ten years after life without parole was adopted in 1995 (death sentences did not begin to fall in Virginia until 2004, after which, regional capital defense offices were established).⁷⁴

The weak relationship between life without parole and actual death sentencing that we have found will certainly surprise many observers. In particular, public opinion polling has suggested that the new sentencing option could dramatically alter the death penalty landscape. The public has long been divided on whether the death penalty is appropriate for murder, but when opinion surveys include LWOP as an alternative, public support for the death penalty is much lower.⁷⁵ Jury research suggests that jurors in capital cases are significantly influenced by the potential that a convicted defendant could ultimately be released on parole.⁷⁶ That said, the "death qualification" procedure for jury candidates, in which judges may screen potential jurors for adverse views on the death penalty, makes public opinion an imperfect proxy for the views of jurors in actual capital cases.⁷⁷ Moreover, some key states, like Florida, did not have jury sentencing for many years after adopting LWOP.

In addition, many states have not required that jurors receive clear instructions concerning LWOP as an alternative to the death penalty. While the Supreme Court in *Simmons v. South Carolina* ruled in 1994 that the jury must be instructed on the lack of parole availability in a case in which future

⁷² See GARRETT, END OF ITS ROPE, supra note 4, at 98-99.

⁷³ See id. at 99.

⁷⁴ See id.

⁷⁵ See Richard C. Dieter, Sentencing for Life: Americans Embrace Alternatives to the Death Penalty, DEATH PENALTY INFO. CTR. (Apr. 1993), http://www.deathpenaltyinfo.org/sentenc ing-life-americans-embrace-alternatives-death-penalty (reporting that "the sentence of life without parole plus restitution causes a support drop of 36% [for the death penalty]").

⁷⁶ See William W. Hood, III, Note, The Meaning of "Life" for Virginia Jurors and Its Effect on Reliability in Capital Sentencing, 75 VA. L. REV. 1605, 1624–25 (1989); see also Note, supra note 41, at 1838 ("The existence of parole has certainly led more juries to sentence defendants to death.").

⁷⁷ See Smith, supra note 64, at 862 n.100 ("The key point here is to distinguish between voters and capital jurors. Among voters, support for the death penalty is greatly reduced, if not overtaken by the opposing view, when LWOP is available."); see also Lockhart v. McCree, 476 U.S. 162, 173 (1986) (holding the practice of "death qualification" to be constitutional).

dangerousness is put before the jury, otherwise the Court has not compelled that jurors be informed of the LWOP option.⁷⁸ Many death penalty states by statute or in state court rulings have required that jurors be informed of the LWOP option.⁷⁹ Other death penalty states did not or were slow to do so, which could predictably blunt any effect at trial (although perhaps not in plea bargaining) of LWOP being formally on the books.⁸⁰ The decline in death sentencing in states like Pennsylvania, in which jurors are still not, except when required by Simmons, required to be informed of the LWOP option, cannot be attributed to LWOP's influence on trial jurors.⁸¹ Accounting for this subtle procedural difference in implementation between states, and properly measuring the year in which LWOP could plausibly influence sentencing behavior, yielded a model with stronger correlation significance and better fit.⁸² The small effect of LWOP on sentencing can, in part, be attributed to the fact that key death penalty states still do not fully instruct jurors on the nature or availability of a noncapital life without parole sentencing option.

The history of the adoption of LWOP reflects its ambiguous role in our statistical findings. Parole was introduced in 1913, and in the decades that followed, life in prison was largely a symbolic phrase, and life sentences were

80 See, e.g., S.C. CODE ANN. § 16-3-20 (2018) (legislation requiring jury instruction that life imprisonment means without parole); State v. Shafer, 573 S.E.2d 796 (S.C. 2002) (relying on statute requiring that jurors be informed of LWOP option enacted seven years after initial LWOP adoption); Yarbrough v. Commonwealth, 519 S.E.2d 602 (Va. 1999) (requiring that jurors be informed of LWOP option four years after statutory adoption).

81 See Commonwealth v. Patterson, 91 A.3d 55, 78–79 (Pa. 2014); Commonwealth v. May, 710 A.2d 44, 47 (Pa. 1998).

82 Where states made statutory changes requiring jurors to be informed of an LWOP option, a one-year lag was introduced to account for the time needed for such changes to take effect. See Appendix C, Table 6 for corresponding results that take LWOP enactment at face value, without accounting for whether juries are actually informed of the option. In statistical terms, the impact of enactment is similarly affected by LWOP statutes that apply only to new offenses, not in proceedings to resentence offenders convicted prior to the LWOP statute. See, e.g., H.B. 27, 1994 Gen. Assemb., 7th Extra Sess. (N.C. 1994) ("Section 6 of this act becomes effective on the date that G.S. 15A-1340.16 becomes effective and applies to offenses committed on or after that date. The remainder of this act becomes effective May 1, 1994. Sections 1, 2, 4, and 5 of this act apply to offenses committed on or after that date. Section 3 of this act applies to trials begun on or after that date."). See also Appendix C, Table 8 for results based on a metric removing resentences in years when juries were being instructed on LWOP; that is, accounting for the hypothesis that LWOP effects are not accurately being measured because the option was unavailable for inmates who had previously been sentenced under the old rules. The resulting model continues to show a far stronger capital defense effect, but a greater impact from LWOP enactment and better overall fit.

⁷⁸ Simmons v. South Carolina, 512 U.S. 154 (1994) (plurality opinion).

⁷⁹ See, e.g., COLO. REV. STAT. ANN. § 18-1.3-1201(1)(b) (West 2018); IDAHO CODE ANN. § 19-2515(7) (2018); IND. CODE ANN. § 35-50-2-9(d) (West 2018); Ky. REV. STAT. ANN. § 532.030(4) (West 2018).

often less than twenty years long.⁸³ Rehabilitation, a long-debated premise of criminal justice in America, had become an entrenched value of the prison system.⁸⁴ However, during the 1970s, lawmakers began to reject rehabilitation as an important goal in criminal justice. In many states, LWOP was adopted as part of a "truth-in-sentencing" and a tough-on-crime push to end parole.⁸⁵ Opponents of the death penalty, meanwhile, had supported adoption of LWOP because they believed it would reduce death sentencing and provide an alternative to death.⁸⁶ Proponents of the death penalty have argued that LWOP adoption would harm the use of the death penalty and prosecutors have in the past opposed LWOP in some states, such as Texas.⁸⁷ In addition, policymakers and scholars have debated the relative cruelty of the death penalty and true life in prison.⁸⁸

Empirical correlation shows a low impact of LWOP-statute enactment on capital punishment, as described, but there is a perverse nondeath penalty story to tell here. As state legislatures exposed a wider range of criminals to this new sentencing option, LWOP sentences have exploded, sweeping in many types of cases that would not be death eligible.⁸⁹ With over 50,000 inmates serving life without parole sentences, and 160,000 prisoners serving life sentences, almost one in nine prisoners is serving a life sentence.⁹⁰ The growth sparks important normative and moral questions about the rise of

86 See id. at 1838–39; see also LEIGEY, supra note 14, at 3–9 (elaborating the abolitionist justifications for introducing life without parole sentencing).

87 See Note, supra note 41, at 1843.

88 See MASUR, supra note 84, at 146 (describing debates in the 1830s on the fundamental tension between the true cruelty of death and life in prison). In their earliest formulation, these debates focused on the implications of solitary confinement. Isolation continues to be an increasingly prevalent tactic in American prisons. See Jeffrey L. Metzner & Jamie Fellner, Solitary Confinement and Mental Illness in U.S. Prisons: A Challenge for Medical Ethics, 38 J. AM. ACAD. PSYCHIATRY & L. 104, 107 (2010). In most state prison systems, inmates sentenced to life without parole are subject to solitary confinement on the basis of misconduct.

89 See MARC MAUER ET AL., SENTENCING PROJECT, THE MEANING OF "LIFE": LONG PRISON SENTENCES IN CONTEXT 33 (2004), https://www.sentencingproject.org/wp-content/ uploads/2016/01/The-Meaning-of-Life-Long-Prison-Sentences-in-Context.pdf ("The findings of this report... compel us to question whether the broad-scale imposition of such penalties has resulted in the use of life imprisonment in ways that too often represent both ineffective and inhumane public policy.").

90 See Ashley Nellis, Sentencing Project, Still Life: America's Increasing Use of Life and Long-Term Sentences (2017), https://www.sentencingproject.org/publications/still-life-americas-increasing-use-life-long-term-sentences/.

⁸³ *See* Note, *supra* note 41, at 1839–44 (detailing the complicated history of the parole system in America). Due to increasingly violent conditions and the natural effects of incarceration, long prison terms do frequently result in death prior to parole release.

⁸⁴ See LOUIS P. MASUR, RITES OF EXECUTION (1989) for history of the death penalty in America from 1776 to 1865.

⁸⁵ Public belief in exaggerated effects of the parole system has been the historical norm. *See* Note, *supra* note 41, at 1840, 1842 (observing that effective prison sentences in states that adopted parole have paradoxically grown longer rather than shorter in the past century).

LWOP sentencing.⁹¹ That said, public opinion strongly supports LWOP when it is framed as an alternative to the death penalty. For example, a Florida poll in 2016 found that fifty-seven percent of participants preferred LWOP to the death penalty (although forty percent also mistakenly believed that persons sentenced to LWOP could be released from prison).⁹²

We note also that some studies have removed states where LWOP was introduced before 1976, reasoning that these observations are irrelevant to the hypothesis that LWOP might affect death sentencing.⁹³ Modifying the regressions to exclude such states further lessens any apparent effects on death sentencing. Table 4 in Appendix A provides a complete table of the year in which LWOP sentencing was introduced as a punishment for murder.⁹⁴

D. State-Level Capital Defense

The provision of capital defense at a state level results in a consistent, strong reduction in capital sentencing across models. The empirical findings are presented alongside an explanation of why lawmakers and courts have pushed for more effective representation of capital defendants. This Article also describes nuanced variations in state approaches to capital defense reform, and finally explores an alternative model. The simplified coding used in this alternative model helps to establish that the empirical findings in this Section are not sensitive to subjective classification choices. We consistently find that states that create a state-level capital defense function tend to see lower volumes of capital sentencing. The relationship between capital defense and death sentencing is stronger and more robust than that of other variables measured, rejecting the null hypothesis at the 0.001 level in both panel models, and exhibiting low standard error.

As early as 1932, the Supreme Court placed focus on the Sixth Amendment right to counsel in capital trials, holding in *Powell v. Alabama* that there is a right of indigent defendants to have counsel appointed in death penalty cases.⁹⁵ More recently in *Strickland v. Washington*, the Court set out a standard for the effectiveness of trial representation.⁹⁶ Since that time, most

⁹¹ *See* LIFE WITHOUT PAROLE: AMERICA'S NEW DEATH PENALTY? (Charles J. Ogletree, Jr. & Austin Sarat eds., 2012) (providing a collection of perspectival essays on the rise of life without parole sentencing); *see also* LEIGEY, *supra* note 14 (recording personal interviews on philosophy and daily life with inmates serving life without parole sentences).

⁹² New Poll Finds "Strong Majority" of Floridians Prefer Life Without Parole over Death Penalty, DEATH PENALTY INFO. CTR., https://deathpenaltyinfo.org/node/6535 (last visited Nov. 28, 2018).

⁹³ For example, Mississippi has had the sentencing option on the books since 1880. *See infra* Appendix A.

⁹⁴ Alaska is the only state in which the life without parole sentence has not been introduced. *See infra* Appendix A, Table 4.

⁹⁵ Powell v. Alabama, 287 U.S. 45 (1932) (establishing that attorneys should be appointed for capital cases even without request by the defendant).

⁹⁶ Strickland v. Washington, 466 U.S. 668 (1984) (establishing as a two-part test for ineffective assistance of counsel claims that: (i) counsel's performance fell below an objec-

states have taken on the task of ensuring higher qualifications of competence for attorneys appointed in capital trials. Despite emphasis by the American Bar Association⁹⁷ and the Institute for Law and Justice⁹⁸ on suitable guidelines for capital defense qualification, studies released between 1999 and 2002 have identified problematic aspects of appointed capital defense in Illinois,⁹⁹ Texas,¹⁰⁰ and Washington.¹⁰¹ In 2001, Supreme Court Justices informally highlighted the issue. Justice Ginsburg declared that "[p]eople who are well represented at trial do not get the death penalty,"¹⁰² and Justice O'Connor highlighted the need for minimum standards for appointment and adequate compensation of appointed capital defenders in public comments questioning the fairness of administration of capital punishment.¹⁰³

Reforming capital defense at a state level serves, first and foremost, to improve the prospects of defendants at trial. Professional capital defense offices can undertake their job as a team to meet the demands of modern capital trial. As one of us has described, regional capital defense offices, like those created in Virginia, can retain social workers and investigators to conduct factual investigation, and can reduce costs since they rely more on nonlawyers, while more effectively representing their clients.¹⁰⁴ Death pen-

99 See Ken Armstrong & Steve Mills, Part 2: Inept Defenses Cloud Verdict, CHI. TRIBUNE (Nov. 15, 1999), https://www.chicagotribune.com/investigations/ct-xpm-1999-11-15-chi-991115deathillinois2-story.html (surveying court records from 1976–1999 that show twentysix death row inmates convicted "have received a new trial or sentencing because their attorneys' incompetence rendered the verdict or sentence unfair").

100 See Tex. DEF. SERV., LETHAL INDIFFERENCE: THE FATAL COMBINATION OF INCOMPETENT ATTORNEYS AND UNACCOUNTABLE COURTS IN TEXAS DEATH PENALTY APPEALS, at x (2002), http://www.fordarlieroutier.org/RelatedLinks/LethalIndifference/front.pdf ("Death row inmates today face a one-in-three chance of being executed without having the case properly investigated by a competent attorney and without having any claims of innocence or unfairness presented or heard.").

101 See Lise Olsen, Uncertain Justice, SEATTLE POST-INTELLIGENCER (Aug. 5, 2001), https://www.seattlepi.com/local/article/Uncertain-Justice-1061663.php (finding that one-fifth of the eighty-four people who faced execution from 1981–2000 were represented by lawyers who had been, or were later, disbarred, suspended, or arrested).

102 Justice Backs Death Penalty Freeze, CBS NEWS (Apr. 10, 2001), http://www.cbsnews.com/news/justice-backs-death-penalty-freeze/ (quoting Justice Ruth Bader Ginsburg).

103 See Associated Press, O'Connor Questions Death Peanlty, N.Y. TIMES (July 4, 2001), https://www.nytimes.com/2001/07/04/us/o-connor-questions-death-penalty.html (quoting Justice Sandra Day O'Connor).

104 See Garrett, The Decline of the Virginia (and American) Death Penalty, supra note 4, at 699 ("This study suggests that it does not take a Dream Team to effectively represent a capital defendant. But it does take a team—a team of specialist capital defense lawyers and investigators, preferably working in a single office . . . that understand[s] the different

tive standard of reasonableness, and (ii) counsel's performance gives rise to a reasonable probability that if counsel had performed adequately, the result would have been different).

⁹⁷ See Am. Bar Ass'n, Guidelines for the Appointment and Performance of Defense Counsel in Death Penalty Cases, 31 HOFSTRA L. REV. 913 (2003).

⁹⁸ INST. FOR LAW & JUSTICE, COMPENDIUM OF STANDARDS FOR INDIGENT DEFENSE SYSTEMS (2000), https://www.mynlada.org/defender/DOJ/standardsv3/welcome.html.

alty trials are completely unlike much of the work that criminal defense lawyers ordinarily perform. They consist in two separate trial phases, and the sentencing phase relies on the ability of the lawyers to present evidence concerning the entire life history of the client, which in turn requires careful investigation and presentation of mental health evidence, educational records, social welfare records, drug and alcohol abuse evidence, evidence of any childhood abuse, and other types of evidence that is typically not marshalled at a standard criminal sentencing.¹⁰⁵

The secondary impacts of reform go beyond success in court. Effective defense also reduces the incentive for prosecutors to seek the death penalty. They will face lawyers that have institutional knowledge and skill at representing clients in a capital case, as opposed to an inexperienced local attorney lacking resources to mount a serious defense.¹⁰⁶ Studies have also argued that funding capital defense on a state level can reduce the overall cost of capital representation and improves the quality of defense.¹⁰⁷

106 See Adam M. Gershowitz, Statewide Capital Punishment: The Case for Eliminating Counties' Role in the Death Penalty, 63 VAND. L. REV. 307 (2010) (arguing that the high degree of institutional knowledge required for capital litigation demands specialization among both defenders and prosecutors).

107 Two common themes in studies of capital defense costs are the importance of qualified counsel to manage the legal complexity of cases, and the clear increase in cost associated with capital charging. *See, e.g.*, CARMICHAEL & CASPERS, *supra* note 105, at 70–71; GOULD & GREENMAN, *supra* note 105, at 24, 65; James M. Anderson & Paul Heaton, Measuring the Effect of Defense Counsel on Homicide Case Outcomes 3 (Dec. 2012) (unpublished manuscript), https://www.ncjrs.gov/pdffiles1/nij/grants/241158.pdf. These studies provide necessary elements for the argument that state provision of capital defense should ultimately reduce cost, as compared to appointment systems.

way that a death penalty case must be litigated from its inception—long before trial—and preferably and typically without a trial.").

See, e.g., DOTTIE CARMICHAEL & HEATHER CASPERS, PUB. POLICY RESEARCH INST., JUDG-105MENT AND JUSTICE: AN EVALUATION OF THE TEXAS REGIONAL PUBLIC DEFENDER FOR CAPITAL CASES 71-72 (2013), http://ppri.tamu.edu/files/Capital_Defender_Report.pdf ("RPDO attorneys begin working on behalf of the client sooner than private assigned counsel.... RPDO attorneys focus services to build a trusting relationship with clients. . . . Public defenders' non-attorney defense team members begin assembling facts and information much more quickly than other court-appointed defense teams."); JON B. GOULD & LISA GREENMAN, REPORT TO THE COMMITTEE ON DEFENDER SERVICES JUDICIAL CONFERENCE OF THE UNITED STATES: UPDATE ON THE COST AND QUALITY OF DEFENSE REPRESENTATION IN FEDERAL DEATH PENALTY CASES 91-92 (2010), http://www.deathpenaltyinfo.org/documents/FederalDPCost2010.pdf ("Counsel in a federal death penalty case must not only be skilled in defending the charged offense, e.g., a homicide, but also must be thoroughly knowledgeable about a complex body of constitutional law and special procedures that do not apply in other criminal cases. They must be able to direct extensive and sophisticated investigations into guilt/innocence and mitigation of sentence. They must have the counseling skills to advise a client deciding between pleading guilty in return for a life sentence and proceeding to trial where the sentencing options are death or life imprisonment without the possibility of release. They must have communication skills to establish trust with clients, family members, witnesses" (footnote omitted)).

Not all states act in the same way or with equal effectiveness to provide capital representation. Establishing guidelines and promising state funding can help to incentivize some lawyers to specialize in capital defense, but neither measure guarantees good defense like creating a state office for such specialists. Similarly, granting counties the option to create their own offices for capital defense can be useful if counties have resources to provide effective representation.¹⁰⁸ That said, we recognize that state offices are not all equally effective. Certain state offices have seen reductions in funding for state-level capital defender offices since their establishment; Georgia is an example, where judges have called the office "systematically broken."¹⁰⁹ Or for example, in Arkansas, the state's supreme court decided in a 1993 opinion that, on constitutional grounds, the task of providing adequate representation to capital-eligible defendants fell to the state, not counties.¹¹⁰ As a result, Arkansas allocated the task to the Public Defense Commission in 1994.¹¹¹ However, reports by that Commission have cited to decades of underfunding.¹¹² Underfunding may be restricting the effectiveness of such offices. Nor is information about adequacy of funding easy to collect.¹¹³ As a result, we note that although our analysis focuses on whether a state formally created a state trial-level defense function, the mere creation of that function may not produce a dramatic change in indigent defense if the office lacks adequate resources. Our findings may not fully capture the difference that having an office for capital trial defense makes, because our findings include states in which there is an office, but a severely underfunded one.

Since our results point to state capital defense as a critical legislative enactment, we conducted further analysis to confirm this model's sensitivity to decisions we made on whether to classify a state as having limited capital representation resources at the state level, even if it did not have an office.

¹⁰⁸ See infra Appendix A (detailing coding of state efforts in providing capital defense). 109 Kyle Martin, Judge's Decision Brings to Light Problems in Georgia Capital Defender Program, AUGUSTA CHRON. (July 14, 2012), https://www.augustachronicle.com/news/crimecourts/2012-07-14/judges-decision-brings-light-problems-georgia-capital-defender-pro-

gram (describing how funding for the office "dropped from \$7 million in 2005 to \$4.5 million" in 2008, and where defense attorneys requested a judge hold the state in contempt for nonpayment of capital defense attorneys).

¹¹⁰ State v. Independence County, 850 S.W.2d 842, 844 (Ark. 1993), *superseded by statute*, Arkansas Public Defender Commission Act of 1993, 1993 Ark. Acts 1193 (codified at Ark. CODE ANN. § 16-87-201–214 (West 2018)), *as recognized in* State v. Crittenden County, 896 S.W.2d 881 (Ark. 1995).

¹¹¹ Ark. Pub. Def. Comm'n, Analysis of Budget Request 493 (2015), https:// www.dfa.arkansas.gov/images/uploads/budgetManuals/0324_public_defender2015.pdf 112 *Id.* at 494.

¹¹³ See SPANGENBERG GRP., RATES OF COMPENSATION FOR COURT-APPOINTED COUNSEL IN CAPITAL CASES AT TRIAL: A STATE-BY-STATE OVERVIEW (2007), https://www.americanbar.org/content/dam/aba/administrative/legal_aid_indigent_defendants/ls_sclaid_def_2007 felony_comp_rates_update_capital.authcheckdam.pdf (classifying states' capital defense provision in terms of (a) how compensation rates are determined, (b) whether rates are paid by county or state, (c) distinctions between in-court and out-of-court pay, and (d) percase maximum compensation).

This secondary coding simply distinguishes states where state-administered offices for capital defense exist versus those where such an office does not exist. The results show similarly large and robust effects, which confirm two critical points. First, the importance of capital defense reform is not dependent upon sensitive classification choices based on funding. Capital defense continued to be the most influential variable in the model, even when variable coding is stripped down such that states were given no credit for partial measures. The secondary model also confirms the straightforward contention of advocacy groups and state offices for capital defense that complain of underfunding: states that achieve only limited gains in the provision of capital defense do not create significant reduction in death sentencing.

E. State Ring v. Arizona Compliance

One could expect that having a jury make a death sentencing decision, rather than a judge, who might be elected, could impact the frequency of death sentences. When *Ring v. Arizona* was decided in 2002, many states did not require that death sentences be imposed by the jury, or they permitted the jury only to make a recommendation, but the judge would make the final determination. Practitioners predicted post-*Ring* that "juries will likely have a harder time reaching a unanimous verdict when the aggravating factor(s) themselves require additional findings of fact beyond the guilty verdict."¹¹⁴ Many experts predicted the same result; for example, James Liebman noted: "There is quite general agreement that over time and over geography, the likelihood of getting a death sentence is greater from a judge than from a jury."¹¹⁵ Others, like Carol Steiker, suspected that the effect might be more mixed, given how in some states, like Alabama, judges frequently overrode jury life sentences, but in states like Delaware, judges often changed jury death sentences to life sentences.¹¹⁶

We found, consistent with Steiker's skepticism, that the requirement that a jury make the final determination in capital sentencing exhibited no reliable impact on actual death sentencing nationally. This Section interprets the results of modeling to show why such a conclusion is appropriate. We displayed, in Table 1, a moderately high coefficient associated with sentencing procedure in linear regression. However, Table 1 also shows how the impact of compliance with *Ring* is lessened considerably by accounting for fixed and random effects. In the panel models, failure to reject the null hypothesis and higher standard error values call into question the significance of the small remaining correlation coefficient.

¹¹⁴ Joseph M. Bernstein, *Keeping the Death Penalty Alive*, DEL. LAW., Winter 2003–04, at 9, 10.

¹¹⁵ Adam Liptak, Fewer Death Sentences Likely if Juries Make Ultimate Decision, Experts Say, N.Y. TIMES (June 25, 2002), https://www.nytimes.com/2002/06/25/us/supreme-court-states-fewer-death-sentences-likely-if-juries-make-ultimate.html.

¹¹⁶ See Carol S. Steiker, Commentary, Things Fall Apart, but the Center Holds: The Supreme Court and the Death Penalty, 77 N.Y.U. L. REV. 1475, 1486 (2002).

In 2002, the Supreme Court in Ring v. Arizona required a jury determination at the final phase of capital sentencing, extending its prior ruling in Apprendi v. New Jersey that the Sixth Amendment right to a jury trial requires that the jury make findings regarding any aggravating factors in crimes.¹¹⁷ The Arizona death penalty procedure in question permitted the trial judge alone to decide whether any aggravating factors were present, to permit a death sentence, and the trial judge alone would decide whether to impose a death sentence.¹¹⁸ The Court held that "[c]apital defendants, no less than noncapital defendants, . . . are entitled to a jury determination of any fact on which the legislature conditions an increase in their maximum punishment."¹¹⁹ The Ring holding resulted from a somewhat convoluted jurisprudential history. The Court acknowledged that the Sixth Amendment right to a trial by jury had never been interpreted as absolute: throughout most of the twentieth century, the Court generally viewed judicial discretion in capital sentencing with approval.¹²⁰ *Ring* specifically overturned the Court's 1990 decision in Walton v. Arizona,121 which narrowly upheld a state practice of granting judges plenary authority at the sentencing stage after a conviction found in a jury trial.¹²² Ten years later, the Court's holding in Apprendi v. New Jersey requires a jury determination on any matter that "increases the penalty for a crime beyond the prescribed statutory maximum."¹²³ In Apprendi, a plurality of four Justices argued that the Apprendi holding was inapposite to capital eligibility under Walton. Only Justice Thomas's concurring opinion suggested the matter required further consideration.¹²⁴ Faced with the question two years later, the Court in *Ring* ruled 7–2 to overturn the Walton holding in light of Apprendi. In dissent, Justice O'Connor feared that the Ring ruling could be used to challenge many hundreds of prisoners who had been already sentenced to death; subsequent decisions confirmed the nonretroactivity of the requirements imposed by Ring.¹²⁵

121 497 U.S. 639 (1990), overruled by Ring, 536 U.S. at 609,

122 Arizona's statutory definition of a valid aggravating factor hinged on the words "especially heinous, cruel, or depraved." *Walton*, 497 U.S. at 646. In *Walton*, the Court reversed its trend of striking down such descriptive language as impermissibly vague. *Id.* at 646–47. Dissenting opinions endorsed by Justices Brennan, Marshall, and Blackmun focused primarily on the Eighth Amendment and due process concerns at play in the case. *Id.* at 674 (Brennan, J., dissenting); *id.* at 677 (Blackmun, J., dissenting). Only a separate opinion by Justice Stevens argued that the Sixth Amendment, correctly interpreted, prohibited the practice of allowing a judge's sole determination to expose a criminal defendant to the death penalty. *Id.* at 709 (Stevens, J., dissenting).

123 Apprendi v. New Jersey, 530 U.S. 466, 490 (2000).

124 Id. at 523 (Thomas, J., concurring).

125 Ring, 536 U.S. at 620–21 (O'Connor, J., dissenting); see also Schriro v. Summerlin, 542 U.S. 348, 358 (2004).

¹¹⁷ Ring v. Arizona, 536 U.S. 584, 609 (2002).

¹¹⁸ See id. at 588.

¹¹⁹ Id. at 589.

¹²⁰ See, e.g., Spaziano v. Florida, 468 U.S. 447 (1984), overruled by Hurst v. Florida, 136 S. Ct. 616 (2016); Proffitt v. Florida, 428 U.S. 242 (1976).

The Supreme Court noted in *Ring* that most death penalty states had already committed factfinding in capital trials to the jury.¹²⁶ Nonetheless, at the time, five states gave the judge sole authority to enter a death sentence, and four more "hybrid" states permitted a judicial role in factfinding.¹²⁷ States reacted to *Ring* at different times. For example, Indiana acted to revise its procedural structures even before the *Ring* holding was official; in the wake of the decision, other states followed suit.¹²⁸ Thus, states reacted to *Ring* in both different ways and at different times, making it a useful subject for empirical examination.¹²⁹

We found that the impression of any correlation between this Ring v. Arizona compliance and capital punishment in the linear model is largely an artifact of the overwhelming impact of two major states that have continuously allowed individual judges to make the final determination in death sentencing: Florida and Alabama. Florida did not comply until after 2016, when the Supreme Court struck down its statute in Hurst v. Florida.¹³⁰ In Alabama, judges continued, until the statute was amended in 2017, to exercise their legal authority to impose death despite a contrary jury determination, and there is no dispute that within Alabama, capital sentencing procedure has directly produced more death sentences. The Alabama scheme required that the jury make a recommendation concerning a death sentence, and the jury must find that at least one aggravating factor exists.¹³¹ However, the jury recommendation was only advisory and a judge could override it.¹³² Following the Supreme Court's ruling in Hurst, there were questions about whether Alabama was in fact complying with Ring.¹³³ These questions were put to rest in 2017 when Alabama enacted legislation ending the ability of judges to override a jury determination in a death penalty case; however, Alabama still permits a non-unanimous 10-2 jury vote to convict.¹³⁴

The effect on death sentencing of whether a state has judge or jury sentencing can be isolated statistically by including interaction variables in the

130 136 S. Ct. 616, 619 (2016).

131 See Ala. Code § 13A-5-46(a)–(f) (2018).

132 2017 Ala. Legis. Serv. 131 (West) (repealing ALA. CODE § 13A-5-47(e), which had previously allowed the judge to override a jury recommendation).

133 See Steiker, supra note 116, at 1479.

134 Ala. Code § 13A-5-46-47.

¹²⁶ See Ring, 536 U.S. at 608 n.6 (majority opinion).

¹²⁷ Id.

¹²⁸ U.S. Supreme Court: Ring v. Arizona, DEATH PENALTY INFO. CTR., http://www.death penaltyinfo.org/us-supreme-court-ring-v-arizona (last visited Jan. 16, 2016). In Florida, Maryland, and Montana, defendants were all granted temporary stays of execution pending the *Ring* decision. *Id*.

¹²⁹ We do not code as part of this analysis whether states require that jurors find aggravating factors outweigh mitigating factors by a particular standard of proof, *see*, *e.g.*, Oken v. State, 835 A.2d 1105, 1131 (Md. 2003), or whether aggravating factors must be specified by statute, *see*, *e.g.*, State v. Ross, 720 S.E.2d 403, 405 (N.C. Ct. App. 2011), or whether judges or jurors decide issues of intellectual disability under *Atkins v. Virginia*; we focus only on the *Ring* issue of whether the judge or jury makes the death sentencing decision.

model.¹³⁵ What interaction variables do is measure the cross-effects between independent variables. That analysis confirms that the effects of final sentencing procedure are indistinguishable from the primary effects of homicides on death sentencing. The apparent effect of *Ring v. Arizona* compliance on capital sentencing is mainly attributable to the use of judge sentencing in states with an otherwise high disposition for the death penalty. Additional scrutiny also reveals trends in important states that seem to dispute any effect of *Ring* compliance on sentencing.

Arizona provides a useful illustration. Table 2 presents the years surrounding *Ring* (decided in 2002) in Arizona. Arizona was among a number of states that made changes to its sentencing procedures in the immediate wake of *Ring v. Arizona*,¹³⁶ yet it did not experience a persistent decline in capital sentencing.

Year	Executions	Capital Sentences	Homicides
1996	2	5	430
1997	2	8	409
1998	4	6	421
1999	7	6	470
2000	3	7	410
2001	0	7	494
2002	0	1	504
2003	0	9	498
2004	0	4	509
2005	0	8	532
2006	0	6	549
2007	1	7	528
2008	0	6	474
2009	0	14	387
2010	1	9	418
2011	4	8	402

TABLE 2: ARIZONA DEATH SENTENCING, BEFORE AND AFTER RING V. ARIZONA

Sources: FBI Supplementary Homicide Reports, the Death Penalty Information Center, and death sentencing data collected by the authors

135 Including interaction variables between homicides and other legislative changes is justified by the large effect of homicides in the model. *See* GELMAN & HILL, *supra* note 61, at 36 ("In practice, inputs that have large main effects also tend to have large interactions with other inputs").

136 See U.S. Supreme Court: Ring v. Arizona, supra note 128.

Beyond the enforcement of legal procedure, the practical effects of ensuring capital defendants access to sentencing by a jury are somewhat opaque.¹³⁷ Studies by Reuters and other public interest organizations show that judges whose terms are subject to election uphold death sentences with twice the frequency of appointed judges.¹³⁸ The issue of judicial election is not measured in these data, but discussion of the troubling political consequences of introducing capital punishment in judicial elections highlights the danger of allocating final decisionmaking in this process to a single individual.¹³⁹ On the other hand, since judges are presumably more willing to uphold laws to the letter, capital defenders are known to prefer a bench trial when legally complex defenses such as mental illness are in play. The preference for judges or juries varies among jurisdictions, and the decision usually involves individual characteristics of a case.

A final explanation for why *Ring* compliance produces insignificant results derives from the observation that death sentencing procedures vary subtly from state to state.¹⁴⁰ The results in this Article are based on coding

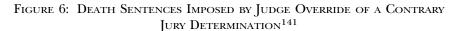
138 Elected Judges Uphold More Death Sentences, Study Finds, EQUAL JUST. INITIATIVE (Nov. 4, 2014), https://eji.org/news/study-elected-judges-uphold-more-death-sentences; Dan Levine & Kristina Cooke, Uneven Justice: In States with Elected High Court Judges, a Harder Line on Capital Punishment, REUTERS (Sept. 22, 2015), https://www.reuters.com/investigates/ special-report/usa-deathpenalty-judges/.

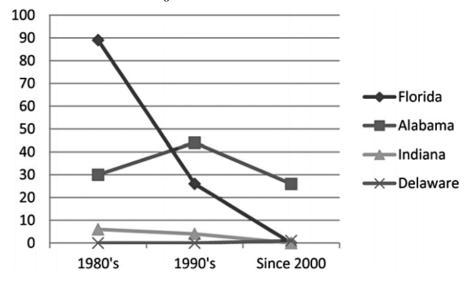
139 See Richard C. Dieter, Killing for Votes: The Dangers of Politicizing the Death Penalty Process, DEATH PENALTY INFO. CTR. (Oct. 1996), http://www.deathpenaltyinfo.org/killing-for-votes.

140 State legal standards are differentiated in two ways. First, Alabama requires agreement by at least ten jurors to make a death recommendation; Delaware goes further, requiring that a death recommendation be made by a unanimous jury. *See U.S. Supreme Court:* Ring v. Arizona, *supra* note 128; *see also* Sean O'Sullivan, *Jury's Votes in Capital Cases Don't Always Sway Judges*, News J. (Del.), Feb. 25, 2011, at A1, A9. Second, Florida law is construed to require that judges may overturn a jury recommendation only in cases when "no reasonable person" would vote for life, while other states allow judges more unfettered authority. *See* EQUAL JUSTICE INITIATIVE, THE DEATH PENALTY IN ALABAMA: JUDGE OVERRIDE 11 (2011), https://eji.org/sites/default/files/death-penalty-in-alabama-judge-override.pdf (citing Tedder v. State, 322 So. 2d 908, 910 (Fla. 1975) (per curiam)). The "no reasonable juror" standard is not directly present in current Florida law. *See* FLA. STAT. § 921.141(2) (2018). The standard, as modified by *Tedder*, becomes similar to laws in Ohio and Califor-

¹³⁷ Supreme Court opinions provide some language suggesting that jury decisions are fairer to the defendant. *See* Ring v. Arizona, 536 U.S. 584, 615–16 (2002) (Breyer, J., concurring) ("In respect to retribution, jurors possess an important comparative advantage over judges. In principle, they are more attuned to 'the community's moral sensibility,' because they 'reflect more accurately the composition and experiences of the community as a whole.' Hence they are more likely to 'express the conscience of the community on the ultimate question of life or death,' and better able to determine in the particular case the need for retribution, namely, 'an expression of the community's belief that certain crimes are themselves so grievous an affront to humanity that the only adequate response may be the penalty of death.'" (citations omitted) (first quoting Spaziano v. Florida, 468 U.S. 447, 481 (1984) (Stevens, J., concurring in part and dissenting in part); then quoting *id.* at 486; then quoting Witherspoon v. Illinois, 391 U.S. 510, 519 (1968); and then quoting Gregg v. Georgia, 428 U.S. 153, 184 (1976))).

that take states at their legislative word if they permit a judge to impose a death sentence (even if a jury also deliberated and chose not to impose a death sentence). Alabama, Delaware, Florida, and Montana are coded as states still using a judge sentencing procedure as of 2001. As Figure 6 below illustrates, however, the actual use of a judicial override is not common in most states. Alabama is the only state in which judges actively exercised their power to override jury decisions to impose death sentences in recent years (until the practice was ended legislatively in 2017); as noted, in contrast, Delaware judges had typically used their power to reduce death sentences to life sentences. Figure 6, which was presented by Justice Sotomayor in her dissent from denial of certiorari in *Woodward v. Alabama*, illustrates clearly that the judicial override mechanism has and continues to produce sentences of capital punishment.





Today, all states have ended the practice of judicial overrides in death penalty cases.¹⁴² What we show is that while current law holds that judge determination in final capital sentencing violates a defendant's constitutional rights, compliance with this requirement shows no empirical impact on numbers of state death sentences. Thus, as with the examination of LWOP adoption, once again we find that legal changes in death sentencing procedures and options did not demonstrably affect death sentencing rates. In contrast,

nia, which both permit judges to override a jury decision in "exceptional circumstances." *See U.S. Supreme Court:* Ring v. Arizona, *supra* note 128.

¹⁴¹ Woodward v. State, 123 So. 3d 989 (Ala. Crim. App. 2011).

¹⁴² The Delaware Supreme Court has concluded that its judicial override violates *Ring* and *Hurst.* Rauf v. State, 145 A.3d 430 (Del. 2016) (en banc) (per curiam).

we found that changing the resources available to the defense, in a consistent statewide matter, did substantially affect state death sentencing rates, even when controlling for the decline in homicides.

III. PRACTICAL AND CONSTITUTIONAL IMPLICATIONS

In this Part, we explore the implications of the findings for litigation strategy, policy, constitutional regulation of the death penalty, and for future death penalty trends. We call on courts to focus more closely on the structural needs of a minimally effective capital defense. It takes an office and a team to effectively handle a capital trial, and the type of postconviction review focusing on discrete questions of investigation and performance in a particular case neglects those structural needs. More states have recognized the structural demands of capital representation, despite the lack of guidance from the courts (and in part because offices are more cost-effective), but the result has been that the death penalty remains prominent in outlier states that continue to rely on court-appointed and local lawyers without the tools to effectively handle capital litigation. This has real Sixth Amendment implications, as well as Eighth Amendment implications concerning the arbitrariness of the death penalty. This also suggests that the death penalty will linger largely in those states that fail to provide adequate defense resources at the trial level.

A. Structural Sixth Amendment Implications

The most direct implication of the prominent role of capital defense reform is further judicial emphasis on the right to effective assistance by counsel, focusing not just on the post hoc reasonableness of the attorney's performance in a given case, but whether there were structures in placelike an office-to make effective representation possible. It is unsurprising, in a sense, that improvements in capital defense are associated with more pronounced and impactful reductions in capital sentencing. Attorney involvement in a case is far longer than any jury's involvement and can help ensure proper investigation, favorable presentation of evidence, and adequate legal protection for a defendant prior to trial.¹⁴³ Improvement to state capital representation systems not only enhances the quality of representation, but also yields prompter appointment of attorneys in capital cases and a localized communal knowledge center for capital defense. After exploring the scope for Supreme Court action in ensuring effective counsel, this Section highlights the development of specialized techniques for death penalty cases that could benefit any litigator involved in capital trial.

¹⁴³ Jury selection techniques play a key role in the success of specialized capital defenders. *See* CARMICHAEL & CASPERS, *supra* note 105, at 45 (elaborating the role of nontraditional defense experts); *see also* Morgan v. Illinois, 504 U.S. 719, 729 (1992) (holding that a defendant may challenge for cause a prospective juror who would automatically vote to impose the death penalty in every capital case).

Capital defense is, in nearly all cases, indigent defense. This provides helpful perspective for understanding the limits on judicial action. The Supreme Court set out in Strickland v. Washington a highly deferential standard of review for claims of ineffective counsel, asking whether an attorney provided unreasonably ineffective assistance (given the range of performance among lawyers in the profession), and whether there is a reasonable probability those failures contributed to the outcome at trial (or constituted "prejudice").¹⁴⁴ In capital cases, the Court has occasionally granted relief on Sixth Amendment claims, particularly in cases in which there was an utter failure to investigate or present mitigating evidence at the sentencing phase in capital trials.¹⁴⁵ While the Court has cited to the American Bar Association standards for capital representation, the Court has never imposed rules that provide the same type of guidance and detail that those standards set out, including as to the mitigation function in capital cases.¹⁴⁶ Mitigation investigators may be indispensable, but it has been the states providing resources for offices to retain them on staff, not the federal courts that have required doing so.¹⁴⁷

The Supreme Court has never suggested that states have an obligation to provide any particular form of capital defense function or any level of resources to support that function. The appointment of indigent defenders by county judges is a system fraught with anecdotes of utterly inexperienced, intoxicated, or simply exhausted lawyers;¹⁴⁸ nearly every state's initial efforts at capital defense were merely extensions of this basic appointment system. For decades, fee caps and pay for attorneys appointed in capital cases were often extremely low.¹⁴⁹ The Court's ability to impose procedures upon states for selection and appointment of capital defenders is limited by basic federalism concerns. But as it becomes increasingly clear that improved representation at the outset of a capital proceeding can substantially alter outcomes, it

¹⁴⁴ See Strickland v. Washington, 466 U.S. 668, 687 (1984) (establishing as a two-part test for ineffective assistance of counsel claims that: (i) counsel's performance fell below an objective standard of reasonableness, and (ii) counsel's performance gives rise to a reasonable probability that if counsel had performed adequately, the result would have been different); see also United States v. Cronic, 466 U.S. 648 (1984); Joshua Kastenberg, Nearing Thirty Years: The Burger Court, Strickland v. Washington, and the Parameters of the Right to Counsel, 14 J. APP. PRAC. & PROCESS 215, 237–50 (2013) (elaborating on the relationship between Strickland and Cronic).

¹⁴⁵ See, e.g., Rompilla v. Beard, 545 U.S. 374, 380 (2005); Wiggins v. Smith, 539 U.S. 510, 534 (2003).

¹⁴⁶ See, e.g., Am. Bar Ass'n, Supplementary Guidelines for the Mitigation Function of Defense Teams in Death Penalty Cases, 36 HOFSTRA L. REV. 677 (2008); see also Russell Stetler, The Mystery of Mitigation: What Jurors Need to Make a Reasoned Moral Response in Capital Sentencing, 11 U. PA. J.L. & SOC. CHANGE 237, 262 (2007).

¹⁴⁷ See Helen G. Berrigan, The Indispensable Role of the Mitigation Specialist in a Capital Case: A View from the Federal Bench, 36 HOFSTRA L. REV. 819, 825–30 (2008).

¹⁴⁸ See Death Penalty Representation, DEATH PENALTY INFO. CTR., http://www.deathpenalty info.org/death-penalty-representation (last visited Jan. 16, 2016).

¹⁴⁹ See Stephen B. Bright, Neither Equal Nor Just: The Rationing and Denial of Legal Services to the Poor When Life and Liberty Are at Stake, 1997 ANN. SURV. AM. L. 783.

may be appropriate for courts at both the state and federal levels to examine not just whether the particular lawyers in a case acted reasonably in conducting their representation, but whether they had the structural resources to perform effectively.¹⁵⁰ State courts have been more open than federal courts in considering such structural Sixth Amendment claims, including at the trial and appellate stages, when limitations on postconviction relief do not apply.¹⁵¹

States have adopted a range of regulatory approaches toward enhancing the capital trial function. Some states, like New York, created capital trial offices immediately when they adopted the death penalty.¹⁵² More states, as described, took a decade or more to do so. States like Virginia adopted regional offices to handle capital trials, while Colorado, North Carolina, and many others adopted a single, central public defender's office for capital trials.¹⁵³ While the most effective reforms of capital defense create dedicated state offices that handle representation, Arizona and Texas have developed shared resources for participating counties.¹⁵⁴

The resources and techniques developed by these and other capital defender services have for some time also assisted capital defenders more informally, through training and consultation, as well as through nonprofit capital defense firms that consult and work on capital trials.¹⁵⁵ Our findings regarding the formal establishing of statewide defense functions certainly do not capture all of the impact that these changes have produced in capital cases. After all, the defense-lawyering effect may be felt to some degree even in states that lack state-level capital defense offices, because better practices

151 See Eve Brensike Primus, Structural Reform in Criminal Defense: Relocating Ineffective Assistance of Counsel Claims, 92 CORNELL L. REV. 679, 710 (2007).

152 See History, N.Y. CAP. DEFENDER OFF., http://www.nycdo.org/ (last visited Dec. 23, 2018).

153 See COLO. REV. STAT. ANN. § 21-1-101 to -106 (West 2018); N.C. GEN. STAT. § 7A-498 (West 2018); VA. CODE ANN. § 19.2-163.01 (West 2018); see also Garrett, The Decline of the Virginia (and American) Death Penalty, supra note 4, at 666, 720–21.

154 See Tx. REG'L PUB. DEF. FOR CAPITAL CASES, FISCAL YEAR 2014 SUMMARY, http://rpdo.org/media/1037/fy14rpdosummary.pdf (last visited Oct. 22, 2018).

155 See, e.g., Protecting the Attorney/Client Relationship: "Bakesale Justice" for Calvin Burdine, GULF REGION ADVOCACY CTR., www.gracelaw.org/burdine2011.html (last visited Apr. 10, 2017); see also Richard Acello, A New Defense Approach to Storytelling Changes Capital Cases in Texas, A.B.A. J. (Mar. 2015), http://www.abajournal.com/magazine/article/a_new_ defense_approach_to_storytelling_changes_capital_cases_in_texas (describing the unorthodox strategies of Texas's Regional Capital Defenders for Capital Cases Office, including aggressive requests for court funding of defense experts, open acknowledgment of litigation costs in settlement negotiations, and radical new narratives constructed with the help of creative nonfiction writers).

¹⁵⁰ But see Andrew Cohen, How Americans Lost the Right to Counsel, 50 Years After Gideon,' ATLANTIC (Mar. 13, 2013), https://www.theatlantic.com/national/archive/2013/03/how-americans-lost-the-right-to-counsel-50-years-after-gideon/273433/ ("I think the Court doesn't have the initiative to get involved in improving the administration of justice in every state . . . The Court's really not the institution to get involved in that." (quoting former Justice John Paul Stevens)).

have been shared among capital trial lawyers that access these resources in the larger capital defense community.

Eve Brensike Primus has argued that courts should adopt a structural reform-oriented approach toward criminal defense representation.¹⁵⁶ With no right to counsel during postconviction proceedings and a focus on prejudice and technical procedural limitations during habeas proceedings, indigent defense–related claims often do not address underlying failings in the system.¹⁵⁷ However, during appeals, when there is a right to counsel, courts could be more open to consider Sixth Amendment claims based on a broader record.¹⁵⁸ That may be the best forum to consider whether as a system, a state is providing sufficient resources for minimally effective capital representation.

B. Policy Implications

For state policymakers who seek fairer application of the death penalty, no option is likely to bear more fruit than state-level reform of capital defense. The results have been striking in states that have created such offices. In contrast, reforms will be particularly important in states like Alabama, California, and Florida, which are particular outliers in nonprovision of state-level capital defense. Most modern death sentences are now entered in California, so capital defense resources in that state will be particularly important. We note that Alabama and Florida had been holdouts on Ring compliance, and the coincidence of these measures is significant. The often emotional backdrop of capital trial has prompted critics to emphasize the critical need to safeguard the integrity of the judicial process.¹⁵⁹ State employment of capital defenders is a key way of ensuring that integrity. Florida and Alabama also exhibit characteristics that have been identified by other papers as key indicia of overapplication of the death penalty. Both states are home to many jurisdictions with substantial wealth disparity and racial heterogeneity.¹⁶⁰ Among the states that now impose the largest share of national death sentences, Florida and Alabama have the greatest scope for improvements in the fairness of the penalty's structure. This analysis does not attempt to discount conscientious administrative efforts by either state.

¹⁵⁶ See Primus, supra note 151, at 679.

¹⁵⁷ See Anne M. Voigts, Note, Narrowing the Eye of the Needle: Procedural Default, Habeas Reform, and Claims of Ineffective Assistance of Counsel, 99 COLUM. L. REV. 1103, 1134 (1999).

¹⁵⁸ See id.; see also Brandon L. Garrett, Aggregation in Criminal Law, 95 CALIF. L. REV. 383 (2007) (generally describing systemic litigation approaches toward criminal justice issues and criminal procedure claims).

¹⁵⁹ See generally Gershowitz, supra note 106; see also Dieter, supra note 139 (citing instances of politically motivated disparagement of death penalty lawyers by judges, prosecutors, and members of state pardon boards).

¹⁶⁰ *See generally* Johnson et al., *supra* note 40 (identifying racial heterogeneity, income distribution and geographic location in the southern United States as relevant traits in predicting the use of the death penalty).

There may also be costs and benefits to emphasizing the state's role in administering the death penalty. States can both enhance and disable the capital defense function, and as we have described, some states have created state-level capital defense offices but then starved them of resources. Adam Gershowitz has argued that perhaps the counties' role in death sentencing should be eliminated entirely-that a state capital prosecutor should be tasked with supervising capital prosecutions, just as some states have created state capital defense functions.¹⁶¹ Stephen Smith and James Liebman have responded that it is the state subsidization of the costs of death sentencing that have permitted an overproduction of death sentences.¹⁶² California voters recently approved a proposition, narrowly to be sure, to expedite judicial review in capital cases, and have rejected a proposition to abolish the death penalty.¹⁶³ In states where capital punishment is popular, it may be unlikely that lawmakers will improve capital defense resources. That said, most death penalty states have done so over the past two decades, perhaps fearing Sixth Amendment reversals or to conserve costs in capital trials, which can be extremely expensive.

C. Eighth Amendment Implications

The Supreme Court ruled in *Furman v. Georgia* that the Eighth Amendment forbade as cruel and unusual death sentences that are "wantonly" or "freakishly" imposed.¹⁶⁴ Since then, the Court has examined death sentencing practices to assure that jurors have discretion to make moral decisions concerning whether to impose the death penalty, while at the same time, the Court aims to regulate and channel that discretion so that the results are consistent. However, the Justices have not closely considered statistical studies of death sentencing as part of that analysis. The Court most notably failed to grant relief based on the findings of the Baldus study in *McCleskey v. Kemp*.¹⁶⁵ The Supreme Court does continue to examine the practice and consensus among the states when imposing per se restrictions on use of the punishment.¹⁶⁶

¹⁶¹ Gershowitz, *supra* note 106, at 342.

¹⁶² See Liebman & Clarke, supra note 36, at 344–45 (quoting Stephen F. Smith, Response, Localism and Capital Punishment, 64 VAND. L. REV. EN BANC. 105, 120 (2011)).

¹⁶³ See Jazmine Ulloa, In California, Death Penalty Abolitionists Pledge to Keep Fighting, L.A. TIMES (Nov. 11, 2016), http://www.latimes.com/politics/la-pol-ca-death-penalty-prop-62-prop-66-20161109-htmlstory.html.

¹⁶⁴ Furman v. Georgia, 408 U.S. 238, 310 (1972) (Stewart, J., concurring); *see, e.g.*, Jurek v. Texas, 428 U.S. 262, 276 (1976); Gregg v. Georgia, 428 U.S. 153, 207 (1976).

^{165 481} U.S. 279 (1987).

¹⁶⁶ *See* Roper v. Simmons, 543 U.S. 551, 568 (2005) ("A majority of States have rejected the imposition of the death penalty on juvenile offenders under 18, and we now hold this is required by the Eighth Amendment."); Atkins v. Virginia, 536 U.S. 304, 315–16 (2002) ("Given the well-known fact that anticrime legislation is far more popular than legislation providing protections for persons guilty of violent crime, the large number of States prohibiting the execution of mentally retarded persons (and the complete absence of States passing legislation reinstating the power to conduct such executions) provides pow-

The Court has highlighted how few states or how few death sentences have been carried out as part of consideration of "objective indicia of [national] consensus" concerning the form of punishment.¹⁶⁷ In 1988, in Thompson v. Oklahoma, a plurality concluded that the Eighth Amendment barred execution of an individual who was less than sixteen years old at the time of the offense; at the time, eighteen legislatures barred the practice and none permitted it explicitly.¹⁶⁸ In 1989, in Penry v. Lynaugh, the Court held that execution of the intellectually disabled was permitted where only two states prohibited it.¹⁶⁹ In 2002, in Atkins v. Virginia, the Court found that national consensus had changed and highlighted how eighteen states barred the death penalty for the intellectually disabled-and even where permitted, such death sentences were rare, with only five states having done so since 1989.¹⁷⁰ In Ring v. Arizona, the Court noted how "the great majority of States responded to this Court's Eighth Amendment decisions requiring the presence of aggravating circumstances in capital cases by entrusting those determinations to the jury."¹⁷¹ In abolishing the juvenile death penalty in its 2005 ruling in Roper v. Simmons, the Court described how thirty states prohibited it,172 and the execution of juvenile offenders was so infrequent that few examples could be identified.¹⁷³ In Kennedy v. Louisiana, the Court held that the Eighth Amendment bars the execution of an individual who raped but did not kill a child, noting that forty-four states and the federal government barred the death penalty for child rape.¹⁷⁴

Eighth Amendment concerns should be heightened today, not regarding specific types of offenders, but the death penalty as generally administered. As noted, in 2016, only fourteen states imposed death sentences—in 2017, it was again fourteen states.¹⁷⁵ The rate of change and the "consistency of the direction of change" in the past two decades is marked.¹⁷⁶ That said, the Supreme Court's decisions like *Atkins, Roper*, and *Kennedy* dealt with specific types of capital defendants who were particularly vulnerable, and not the broader argument that the entire death penalty is now a rare and arbitrary event. To be sure, in 2015, in his dissent in *Glossip v. Gross*, Justice Breyer,

- 170 Atkins, 536 U.S. at 314-16.
- 171 Ring v. Arizona, 536 U.S. 584, 607-08 (2002).
- 172 Roper, 543 U.S. at 564.
- 173 Id. at 565.

174 Kennedy v. Louisiana, 554 U.S. 407, 421, 423 (2008).

175 See Bazelon, supra note 3 ("Of the 26 remaining states, only 14 handed down any death sentences last year"); see also GARRETT, END OF ITS ROPE, supra note 4, at 132–66; Death Sentences in 2017, DEATH PENALTY INFOR. CTR., https://deathpenaltyinfo.org/2017-sentencing (last visited Nov. 4, 2018).

176 See Roper, 543 U.S. at 565-66 (citing Atkins v. Virginia, 536 U.S. 304, 315 (2002)).

erful evidence that today our society views mentally retarded offenders as categorically less culpable than the average criminal.").

¹⁶⁷ See, e.g., Roper, 543 U.S. at 563-64.

¹⁶⁸ See Thompson v. Oklahoma, 487 U.S. 815, 838 (1988) (plurality opinion); *id.* at 829 n.29.

¹⁶⁹ See Penry v. Lynaugh, 492 U.S. 302, 334 (1989), abrogated by Atkins, 536 U.S. 304.

joined by Justice Ginsburg, emphasized that the death penalty has "increasingly become unusual," having "declined rapidly" in the last fifteen years.¹⁷⁷ That reasoning could be buttressed by these findings. That reasoning is also relevant at the state level. The Connecticut Supreme Court, in its 2015 ruling finding the state death penalty unconstitutional under the state law, emphasized geographic disparities and data concerning arbitrariness and bias in patterns of sentencing, in its ruling.¹⁷⁸ Most recently, a unanimous decision by the Washington Supreme Court applied state constitutional law to find the death penalty unconstitutional.¹⁷⁹ We note that the U.S. Supreme Court denied a certiorari petition based on data concerning patterns of death sentencing in Arizona.¹⁸⁰

D. Implications for Future Death Penalty Trends

The implication of these data is that the death penalty will continue its steady decline. To be sure, death penalty trends have reversed themselves in the past; death sentences increased dramatically following the Supreme Court's ruling in *Furman*, and they continued to increase through the 1990s.¹⁸¹ However, the decline in death sentencing has been two decades in the making, and a reversal might take some time. These trends are therefore likely to persist, even if the portion of death sentencing that is linked to homicide rates may change if homicide rates increase in the future. It is less clear that judges will rely on these data in Eighth Amendment rulings on the death penalty. That said, Sixth Amendment rulings regarding the importance of an established mitigation function and statewide uniform trial representation might be bolstered by these findings, perhaps more so than in the Eighth Amendment context (about which county-level data analysis that we have separately conducted may have more traction).¹⁸²

Justices reach for wider statistical results for perspective in all areas of law, yet the death penalty retains a special role in empirical argumentation. The most recent in a series of empirically driven arguments on capital punishment came in *Glossip v. Gross.* Justice Breyer emphasized that the death penalty has "increasingly become unusual," having "declined rapidly" in the last fifteen years. In a dissent from denial of certiorari issued late in 2016,

181 Hidalgo, 138 S. Ct. 1054.

¹⁷⁷ Glossip v. Gross, 135 S. Ct. 2726, 2772-73 (2015) (Breyer, J., dissenting).

¹⁷⁸ *See* State v. Santiago, 122 A.3d 1, 58, 81 (Conn. 2015) (noting that some counties have rarely or almost never imposed the death penalty in the state and that nationally, less than two percent of counties account for all death sentences); *see also* State v. Peeler, 140 A.3d 811, 811 (Conn. 2016) (per curiam) (finding ruling retroactive).

¹⁷⁹ State v. Gregory, 427 P.3d 621, 642 (Wash. 2018) (describing findings of statistical study, finding significant county-level variation in death sentences, as well as strong race-based variations).

¹⁸⁰ See Petition for Writ of Certiorari at 18, Hidalgo v. Arizona, 138 S. Ct. 1054 (2018) (No. 17-251).

¹⁸² See Garrett et al., supra note 11 (reporting the results of statistical analysis of data on all death sentencing by county from 1990 to 2016).

safeguards."184

Justice Breyer reiterated an argument that the death penalty has become unconstitutional on the basis of its application in isolated and geographically disparate counties.¹⁸³ Justice Sotomayor also made reference to the concerns of arbitrariness under the Eighth Amendment raised in *Glossip*, stating that, "[w]hether our system of capital punishment is inconsistent with the Eighth Amendment, as these critics have charged, is not at issue here," but adding that "I do believe, however, that whatever flaws do exist in our system can be tolerated only by remaining faithful to our Constitution's procedural

A continued focus on the Sixth Amendment right to counsel as a structural right that must be understood to require resources at the systemic level, and not just considered with respect to prejudice at individual trials, provides another important place to start. The issue might not be whether capital punishment is unusual, arbitrary, or cruel. Instead, perhaps if states are unwilling to invest in fair capital defense structures, their authority to impose this ultimate sanction should be questioned. There are drawbacks to a Sixth Amendment–focused approach. For one, instances of botched and prolonged executions attach themselves to the Eighth Amendment's cruelty prong. For another, judges are positioned to oversee state and nationwide trends in sentencing patterns across counties, which reveal concerns of "arbitrariness" that are relevant to an Eighth Amendment analysis. But perhaps for too long, the judiciary has remained insufficiently attentive to the Sixth Amendment problem: a fundamental failure by many states to provide effective trial level defense from a capital defender's office.

CONCLUSION

In order to understand how and why use of the death penalty has declined by more than two-thirds, far faster than national polling and crime trends would predict, this Article models capital sentencing in linear and panel models using coded state legislative data to study the enactment of life without parole statutes, the requirement of a jury determination at the final sentencing phase, and establishment of state systems of capital representa-

¹⁸³ Sireci v. Florida, 137 S. Ct. 470 (2016) (Breyer, J., dissenting from denial of certiorari) ("The number of yearly executions has fallen from its peak of 98 in 1999 to 19 so far this year, while the average period of imprisonment between death sentence and execution has risen from 12 years to over 18 years in that same period." (citing DEATH PENALTY INFO. CTR., FACTS ABOUT THE DEATH PENALTY (2016), http://www.deathpenaltyinfo.org/ documents/FactSheet.pdf; SNELL, *supra* note 1, at 14 tbl.10; *Execution List 2016*, DEATH PENALTY INFO. CTR., http://www.deathpenaltyinfo.org/execution-list-2016 (last visited Nov. 3, 2018))).

¹⁸⁴ Elmore v. Holbrook, 137 S. Ct. 3, 10–11 (2016) (Sotomayor, J., dissenting from denial of certiorari) ("Many observers, on and off this Court, have questioned the reliability and fairness of the imposition of capital punishment in America." (citing Glossip v. Gross, 135 S. Ct. 2726, 2755 (2015) (Breyer, J., dissenting); Baze v. Rees, 553 U.S. 35, 86 (2008) (Stevens, J., concurring in judgment); Callins v. Collins, 510 U.S. 1141, 1145 (1994) (Blackmun, J., dissenting from denial of certiorari); BALDUS ET AL., *supra* note 34, at 4; William A. Fletcher, *Our Broken Death Penalty*, 89 N.Y.U. L. REV. 805 (2014))).

tion. We found that legal changes did not matter nearly as much as improved defense resources. After showing that the decline in sentencing exceeds the explanatory capacity of reduced homicide rates or totals, empirical modeling is presented to argue that state provision of capital defense is the measure most strongly and robustly correlated with a decline in actual death sentences. LWOP enactments are also inconsistently associated with reduced sentencing, and, where significant, the coefficient associated with their impact is between fifty percent and seventy percent smaller than effects associated with capital defense reform. Mandating a jury determination on the presence of an aggravating factor has no clear or consistent effect on capital sentencing. The defense-lawyering effect, in contrast, was robust and consistently strong across models.

The empirical findings have implications for judges, capital litigators and state policymakers. First, the conclusions support the view that the modern death penalty implicates arbitrariness concerns under the Eighth Amendment. These data highlight that death sentencing occurs today not in places with more homicides, but rather in places with comparatively less resourced defense lawyers. Second, the emphasis on capital defense directly suggests focus on the Sixth Amendment right to counsel in capital trial, and urges that the effective tactics developed by specialized capital defenders should be employed more widely. States that seek to improve the fairness of capital trials should focus on creating cost-effective offices to handle the function. Dramatic gains in the fair and effective administration of capital punishment are possible by way of capital defense reform in holdout states like Alabama, California, and Florida. We also note that there are cost-effective and practical ways to create statewide consistency in defense short of creating entire offices, including by pooling resources among local defense offices.

The death penalty is in a state of decline, with death sentencing in 2016 and 2017 declining to record lows. We can credit the provision of meaningful resources for capital defenders as playing an important role in this national trend: a defense-lawyering effect. We can also point to the deep need to improve resources for indigent defense in this country, as policymakers across the country continue to rethink our approach to incarceration and criminal justice. In capital cases, unless courts turn toward the structural demands of effective defense lawyering, rather than examine ineffective assistance claims in the one-off setting of postconviction challenges to individual trials, states may continue to deny resources needed to effectively represent people facing the death penalty. If so, our results show how the uneven quality of defense resources raises both deep constitutional and policy concerns about the state of the American death penalty.

Appendix A

State	Final Authority on C	Capital Sentencing, by	Legislation
Alabama	Judge: 1979–2015		
Alaska	No Death Penalty: 1979–2015		
Arizona	Judge: 1979–2002	Jury: 2003–2015	
Arkansas	Jury: 1979–2015		
California	Jury: 1979–2015		
Colorado	Jury: 1979–2015	Judge: 1995–2003	Jury: 2004–2015
Connecticut	Jury: 1979–2014	No Death Penalty: 2015	
Delaware	Jury: 1979–1990	Judge: 1991–2002	Jury: 2003–2015
District of Columbia	No Death Penalty: 1979–2015		
Florida	Judge: 1979–2015		Jury: 2016
Georgia	Jury: 1979–2015		
Hawaii	No Death Penalty: 1979–2015		
Idaho	Judge: 1979–2002	Jury: 2003–2015	
Illinois	Jury: 1979–2011	No Death Penalty: 2012–2015	
Indiana	Judge: 1979–2001	Jury: 2002–2015	
Iowa	No Death Penalty: 1979–2015		
Kansas	No Death Penalty: 1979–1993	Jury: 1994–2015	
Kentucky	Jury: 1979–2015		
Louisiana	Jury: 1979–2015		
Maine	No Death Penalty: 1979–2015		
Maryland	Jury: 1979–2012	No Death Penalty: 2015	
Massachusetts	No Death Penalty: 1979–1981	Jury: 1982–1984	No Death Penalty: 1985–2015
Michigan	No Death Penalty: 1979–2015		
Minnesota	No Death Penalty: 1979–2015		

Table 3: Judge Versus Jury Capital Sentencing, by State, $1979-2015^{185}$

185 Data used in this Article is made available in spreadsheet format at https://virginia.box.com/s/mdcaw4llq4ctgs1ywaqr7vqsqkfwvpg8.

State	Final Authority on C	Capital Sentencing, by	Legislation
Mississippi	Jury: 1979–2015		
Missouri	Judge: 1979–2002	Jury: 2003–2015	
Montana	Judge: 1979–2015		
Nebraska	Judge: 1979–2014	No Death Penalty: 2015	
Nevada	Judge: 1979–2002	Jury: 2003–2015	
New Hampshire	Jury: 1979–2015		
New Jersey	Jury: 1979–2006	No Death Penalty: 2007–2015	
New Mexico	Jury: 1979–2009	No Death Penalty: 2010–2015	
New York	No Death Penalty: 1979–1995	Jury: 1996–2003	No Death Penalty: 2004–2015
North Carolina	Jury: 1979–2015		
North Dakota	No Death Penalty: 1979–2015		
Ohio	Jury: 1979–2015		
Oklahoma	Jury: 1979–2015		
Oregon	Judge: 1979–1981	No Death Penalty: 1982–1983	Jury: 1984–2015
Pennsylvania	Jury: 1979–2015		
Rhode Island	No Death Penalty: 1979–2015		
South Carolina	Jury: 1979–2015		
South Dakota	Jury: 1979–2015		
Tennessee	Jury: 1979–2015		
Texas	Jury: 1979–2015		
Utah	Jury: 1979–2015		
Vermont	No Death Penalty: 1979–2015		
Virginia	Jury: 1979–2015		
Washington	Judge: 1979–1980	Jury: 1981–2015	
West Virginia	No Death Penalty: 1979–2015		
Wisconsin	No Death Penalty: 1979–2015		
Wyoming	Jury: 1979–2015		

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State	Year ¹⁸⁶	Year Jurors Instructed on LWOP Alternative
Alabama	1981	1981 ¹⁸⁷
Alaska*	No LWOP	
Arizona	1993	No general requirement of instruction ¹⁸⁸
Arkansas	1976	1980^{189}
California	1976	1977^{190}
Colorado	2002	2002 ¹⁹¹
Connecticut	1985	1985^{192}
Delaware	2003	2003 ¹⁹³
District of Columbia*	1981	
Florida	1994	1994 ¹⁹⁴

 TABLE 4: YEAR OF LWOP ENACTMENT, BY STATE, 1979–2015

 * Denotes state that has abolished the death penalty.

186 See Year That States Adopted Life Without Parole (LWOP) Sentencing, DEATH PENALTY INFO. CTR. (Aug. 2, 2010), http://www.deathpenaltyinfo.org/year-states-adopted-life-with-out-parole-lwop-sentencing (providing a national summary of statute adoption referenced throughout Appendix A).

187 See Sample Form 39, Forms of Verdict, ALA. JUD. Sys., http://judicial.alabama.gov/docs/library/rules/crsam39.pdf (last visited Dec. 24, 2018); see also ALA. CODE § 13A-5-46 (2018).

188 See, e.g., ARIZ. REV. STAT. ANN. § 13-703,-751, -752 (2018) (jury decides first whether or not death is appropriate; if jury decides death is not appropriate, "the court shall determine whether to impose a sentence of life or natural life").

189 See Ark. CODE ANN. § 5-4-603 (2018); see also; Anderson v. State, 108 S.W.3d 592, 608 (Ark. 2003) (explaining the nature of Jury Forms 1–4; Form 4 states "the jury's sentence of death or life without the possibility of parole"); Willett v. State, 911 S.W.2d 937, 944–45 (Ark. 1995); 1 Ark. MODEL JURY INSTRUCTIONS 2d 1008 (LexisNexis 2018).

190 See, e.g., CALIFORNIA JURY INSTRUCTIONS—CRIMINAL § 8.84, (West 2018); *id.* § 8.88 (standard jury instructions give choice between death and life without possibility of parole); *see also* People v. Bunyard, 756 P.2d 795, 833 (Cal. 1988) (overturning death sentence because the jury was instructed on the governor's power to commute a "life without possibility of parole" sentence; commutation instruction held too prejudicial); People v. Green, 609 P.2d 468, 504–05 (Cal. 1980) (recounting legislative change to death penalty statutes and referencing new scheme of death or life without parole decision for jury).

191 See COLO. REV. STAT. § 18-1.3-1201(1)(b) (2018) ("The jury shall be instructed that life imprisonment means imprisonment for life without the possibility of parole.").

192 See CONN. GEN. STAT. § 53a-46a(g) (2018) (including the language "life imprisonment without the possibility of release").

193 *See* DEL. CODE ANN. tit. 11, § 4209 (2018) (making first-degree murder punishable by "imprisonment for the remainder of the person's natural life without benefit of probation or parole or any other reduction"). Delaware provided judicial authority to impose life without parole at the penalty phase of capital trial until 2016. *See* Rauf v. State, 145 A.3d 430 (Del. 2016) (en banc) (per curiam).

194 See FLA. STAT. § 775.082(1)(a) (2018) ("[S]uch person shall be punished by life imprisonment and shall be ineligible for parole.").

Georgia	1993	1993^{195}
Hawaii*	1976	
Idaho	2004	2004^{196}
Illinois*	1978	No general requirement of instruction ¹⁹⁷
Indiana	1994	1994^{198}
Iowa*	1997	
Kansas	2004	No general requirement of instruction ¹⁹⁹
Kentucky	1998	1998^{200}
Louisiana	1988	1988^{201}
Maine*	1841	
Maryland*	1987	1990^{202}

195 See GA. CODE ANN. § 17-10-31 (2018) (providing that jury may choose LWOP or life with option of parole, and may be instructed on the definition of each); see also id. § 17-10-16 (identifying May 1, 1993 as earliest date of conviction eligible for life without parole).

196 See IDAHO CODE § 19-2515(7) (2018) ("The jury shall be informed as follows . . . defendant will be sentenced to a term of life imprisonment without the possibility of parole"); see also id. § 18-4003 (degrees of murder); id. § 18-4004 (2018) (punishment for murder); id. § 19-2515 (sentence in capital cases).

197 *See, e.g.*, People v. Bannister, 902 N.E.2d 571, 587–88 (Ill. 2008) (holding defendant not entitled to jury instruction at penalty phase of capital murder trial, and that a noncapital penalty would result in a "de facto natural life" term of imprisonment based on defendant's age); People v. Simms, 572 N.E.2d 947, 957 (Ill. 1991) (holding trial court acted properly in instructing jury that it would impose sentence other than death, without instructing jury specifically of possible terms of imprisonment, despite defendant's claim that, without that additional information, jury could believe that defendant would be released in only a few years if it did not impose death penalty).

198 See IND. CODE ANN. § 35-50-2-9(d) (West 2018) ("The court shall instruct the jury concerning... the potential for consecutive or concurrent sentencing, and the availability of educational credit, good time credit, and clemency.").

199 See State v. Kleypas, 40 P.3d 139, 270 (Kan. 2001) ("In the absence of a request, the trial court has no duty to inform the jury in a capital murder case of the term of imprisonment to which a defendant would be sentenced if death were not imposed. Where such an instruction is requested, the trial court must provide the jury with the alternative number of years that a defendant would be required to serve in prison if not sentenced to death."), overruled on other grounds by Kansas v. Marsh, 548 U.S. 163 (2006).

200 See Ky. REV. STAT. ANN. § 532.030(4) (West 2018) ("The instructions shall state, subject to the aggravating and mitigating limitations and requirements of KRS 532.025, that the jury may recommend upon a conviction for a capital offense a sentence of death, or at a term of imprisonment for life without benefit of probation or parole").

201 See LA. CODE CRIM. PROC. ANN. art. 905.6 (2018); see also id. art. 905.7 ("The form of jury determination shall be as follows: . . . The jury unanimously determines that the defendant should be sentenced to life imprisonment without benefit of probation, parole or suspension of sentence.").

202 See Bruce v. State, 569 A.2d 1254, 1268-69 (Md. 1990) (holding jury must be instructed on the exact meaning of life without parole sentence).

Massachusetts*	1955	No general requirement of instruction ²⁰³
Michigan*	1953	
Minnesota*	1992	
Mississippi	1880	1994^{204}
Missouri	1984	2001 ²⁰⁵
Montana	1995	$1995^{^{206}}$
Nebraska*	2002	2002–2011 ²⁰⁷
Nevada	1967	$1985^{^{208}}$
New Hampshire	1974	1974^{209}
New Jersey*	1995	2000 ²¹⁰
New Mexico*	2009	

203 See Commonwealth v. Ferreira, 364 N.E.2d 1264, 1271 (Mass. 1977).

204 See MISS. CODE ANN. § 99-19-101 (2018); Rubenstein v. State, 941 So. 2d 735, 793 (Miss. 2006) ("The Legislature determined that a person convicted of capital murder whose trial begins after July 1, 1994, **shall** receive sentencing instructions that include the option of life without parole.").

205 See Mo. Rev. STAT ANN. § 565.030.4 (2018) ("If the trier is a jury it shall be instructed before the case is submitted that if it is unable to decide or agree upon the punishment the court shall assess and declare the punishment at life imprisonment without eligibility for probation, parole, or release except by act of the governor or death."). 206 See MONT. CODE ANN. § 46-18-219(2) (West 2017) ("[A]n offender sentenced under subsection (1): shall serve the entire sentence; shall serve the sentence in prison; may not for any reason, except a medical reason, be transferred for any length of time to another type of institution, facility, or program; may not be paroled; and may not be given time off for good behavior or otherwise be given an early release for any reason.").

207 See NEB. REV. STAT. ANN. § 29-2204 (West 2018); see also 2011 Neb. Laws 12 (removing "without parole" language). In 2011, Nebraska changed its statutory nomenclature from "life imprisonment without parole," to "life imprisonment," while retaining parole eligibility guidelines that left no possibility of parole for inmates so sentenced. See NEB. REV. STAT. ANN. § 83-1,110 (West 2018); see also Poindexter v. Houston, 750 N.W.2d 688, 693 (Neb. 2008) ("[Defendant] is eligible for parole under the current statute once he has served one-half his life sentence. Because the sentence is indefinite, it is impossible to determine when [defendant] will have served one-half his life sentence. We conclude that under § 83-1,110 (Cum.Supp.2006), [defendant] is not eligible for parole until the Board of Pardons commutes his life sentence to a term of years.").

208 See Petrocelli v. State, 692 P.2d 503, 511 (Nev. 1985) ("[T]he following instruction, and none other, may be given: . . . Life imprisonment without the possibility of parole means exactly what it says, that the Defendant shall not be eligible for parole.").

209 See N.H. REV. STAT. ANN. § 630:5 (2018); see also id. § 651-A:7 (identifying April 15, 1974, as earliest date of conviction eligible for life without parole).

210 See N.J. STAT. ANN. § 2C:11-3 (West 2018).

New York*	1995	1995 ²¹¹
North Carolina	1994	1994^{212}
North Dakota*	1997	
Ohio	1995	1995^{213}
Oklahoma	1987	1987^{214}
Oregon	1989	1989^{215}
Pennsylvania	1941	No general requirement of instruction ²¹⁶
Rhode Island*	1979	
South Carolina	1995	2002 ²¹⁷
South Dakota	1978	$1978^{^{218}}$
Tennessee	1995	1995^{219}
Texas	2005	2005^{220}
Utah	1992	1992^{221}
Vermont*	1987	
Virginia	1994	1999^{222}
Washington	1981	1981^{223}

211 See N.Y. CRIM. PROC. LAW § 400.27 (McKinney 2018). But see, e.g., People v. LaValle, 817 N.E.2d 341, 359 (N.Y. 2004); People v. Harris, 677 N.Y.S.2d 659, 662 (N.Y. Sup. Ct. 1998) (invalidating separate jury instructions regarding interaction of deadlock provisions with eventual possibility of parole).

212 See N.C. GEN. STAT. § 15A-2002 (2018) ("The judge shall instruct the jury, in words substantially equivalent to those of this section, that a sentence of life imprisonment means a sentence of life without parole.").

213 See Ohio Rev. Code Ann. § 2929.03 (West 2018).

214 *See* OKLA. STAT. ANN. tit. 21, § 701.10 (West 2018); Martinez v. State, 904 P.2d 138, 142 (Okla. Crim. App. 1995) (holding failure to instruct on meaning of life without parole reversible error).

215 See OR. REV. STAT. ANN. § 163.150 (West 2018); State v. McDonnell, 987 P.2d 486, 488, 495–96 (Or. 1999) (holding failure to deliver "true life" instruction reversible error).

216 See 42 PA. CONS. STAT. § 9711 (2018); see also Bronshtein v. Horn, 404 F.3d 700, 716 (3d Cir. 2005) (holding where future dangerousness put at issue, life without parole instruction must be given; if not, jury does not have to be informed that a "life sentence" means life without parole).

217 See S.C. CODE ANN. § 16-3-20 (2018); State v. Shafer, 573 S.E.2d 796, 801 (S.C. 2002) ("[W]hen requested by the state or the defendant, the judge must charge the jury in his instructions that life imprisonment means until the death of the defendant without the possibility of parole.").

218 See S.D. Codified Laws § 24-15-4 (2018).

219 See Tenn. Code Ann. § 39-13-204(e)(2) (2018).

220 See Tex. Penal Code Ann. § 12.31 (West 2017).

221 See Utah Code Ann. § 76-3-207(5) (West 2018).

222 See Yarbrough v. Commonwealth, 519 S.E.2d 602, 616 (Va. 1999).

223 See Wash. Rev. Code § 10.95.030 (2018).

West Virginia*	1965	
Wisconsin*	1994	
Wyoming	1996	No general requirement of instruction ²²⁴

TABLE 5: CAPITAL TRIAL REPRESENTATION AND FUNDING,
BY STATE, 1979–2015

State	Transition Year(s)	State-level Capital Defense	Notes
Alabama		No	County appointment system: \$70 hourly rate. ²²⁵
Arizona	2001*	Limited	Pooled funding contributed by counties on voluntary participation basis. ²²⁶
Arkansas	1993	Full	Arkansas Public Defender Commission handles capital defense. Reports of continuous resource shortfalls are noted in budgetary analysis. ²²⁷
California	1990, 2003	No	Since 1990, county defense at a trial level has been supported with training by the Office of the State Public Defender (an entity primarily focused on capital appeals and habeas petitions). ²²⁸ The legislature has also passed guidelines for trial-level representation. ²²⁹
Colorado	1963	Yes	Colorado State Public Defender provides representation in all capital cases in Colorado. ²³⁰
Connecticut	1978	Yes	Connecticut Division, State Public Defender Capital Defense and Trial Services Unit provides capital defense. ²³¹

²²⁴ See WYO. STAT. ANN. § 6-2-102 (2018); Olsen v. State, 67 P.3d 536 (WyO. 2003) (holding jury will receive LWOP instruction if future dangerousness at issue; if the prosecution introduces statement regarding clemency, jury must be informed that under Wyoming law, life without parole sentences are ineligible for clemency).

225 See Katherine Sayre, Indigent Defense: Alabama Expects to Save Millions in Payments to Lawyers, ADVANCE LOCAL (May 29, 2012, 6:48 AM), http://blog.al.com/live/2012/05/indigent_defense_alabama_expec.html (reporting creation of a statewide oversight group and an increase from the previous \$65/\$45 hourly rate for county-appointed representation). 226 See ARIZ. REV. STAT. ANN. § 11-588 (2018).

227 See ARK. PUB. DEF. COMM'N, ANALYSIS OF BUDGET REQUEST 538 (2016), http:// www.dfa.arkansas.gov/offices/budget/budgetRequests/0324_public_defender.pdf. 228 See About Us, supra note 22.

229 See CAL. R. CT. 4.117 (adopted effective January 1, 2003). For a description of ongoing shortfalls in county public defender funding, including in capital cases, see, for example, Laurence A. Benner, *The California Public Defender: Its Origins, Evolution and Decline*, 5 CAL. LEGAL HIST. 173 (2010).

State	Transition Year(s)	State-level Capital Defense	Notes
Delaware	1964*, 2009	Yes	Office of Defense Services of Delaware represents capital defendants. Homicide Unit specializing in capital cases formed in 2009. ²⁹²
Florida	1974**, 2006**	No	County public defenders provide capital defense, with some partial state funding. ²³³
Georgia	2003*, 2005	Yes	Georgia Public Defender Council provides capital defense for Georgia. ²³⁴
Idaho	1998*	Limited	Capital Crimes Defense Fund funded by voluntary county participation. Multiple counties report underfunding. ²³⁵
Illinois	1999**, 2002*	Limited	Capital Litigation Trust Fund assists both prosecution and defense in capital cases. ²³⁶
Indiana	1989*	Limited	Indiana Public Defender Commission determines standards for appointment and compensation of counsel in capital cases. ²³⁷
Kansas	1995	Yes	State Board of Indigents' Defense Services provides defense in capital cases. ²³⁸
Kentucky	1972	Yes	Department of Public Advocacy defends in capital cases or advises and funds county-contracted attorneys. ²³⁹

230 See History of the Office of the State Public Defender, OFF. COLO. ST. PUB. DEFENDER, http://www.coloradodefenders.us/information/history-of-the-office-of-the-state-public-defender-2/ (last visited Jan. 16, 2016).

231 See CONN. GEN. STAT. § 51-291 (2018); Gideon's Legacy in Connecticut: Public Defender Offices and Specialized Units, DIVISION PUB. DEFENDER SERVS., http://www.ct.gov/ocpd/cwp/view.asp?a=4087&q=479200 (last updated Dec. 13, 2018).

233 See Spangenberg Grp., supra note 113, at 5-6.

234 See Ga. Code Ann. § 17-12-1 (2018).

235 See IDAHO ASS'N OF CTYS., CAPITAL CRIMES DEFENSE FUND: POLICY AND PROCEDURE MANUAL (2017), http://idcounties.org/wp-content/uploads/2016/01/CCDF-Manual.pdf; see also Idaho Counties Struggle with Costs of Death Penalty, DEATH PENALTY INFO. CTR., http://www.deathpenaltyinfo.org/node/921 (last visited Oct. 27, 2018).

236 See Leigh B. Bienen, Capital Punishment in Illinois in the Aftermath of the Ryan Commutations: Reforms, Economic Realities, and a New Saliency for Issues of Cost, 100 J. CRIM. L. & CRIMINOLOGY 1301, 1321–22 (2010).

²³² See Our Services, OFF. DEF. SERVS., https://ods.delaware.gov/our-services/ (last visited Oct. 27, 2018).

State	Transition Year(s)	State-level Capital Defense	Notes
Louisiana	2002*, 2009	Yes	Louisiana Public Defender Board Guidelines for Public Defense require state guidelines for representation in capital cases. Separate offices provide dedicated conflict counsel and representation for New Orleans capital cases. ²⁴⁰
Maryland	1988	Yes	Office of the Public Defender Capital Defense Division (now Aggravated Homicide Division) handles capital defense. ²⁴¹
Mississippi	2000*	Limited	Office of Capital Defense Counsel handles a small number of capital cases, as well as training services. ²⁴²
Missouri	1989	Yes	State Public Defender System handles all capital cases. ²⁴³
Montana		No	County appointment system, with some state training resources provided. ²⁴⁴
Nebraska	1995*	Limited	Nebraska Commission on Public Advocacy handles a small number of capital cases. ²⁴⁵
Nevada	1991*	Limited	Clark and Washoe Counties have independent public defender offices handling capital defense. Other counties subject to state oversight. ²⁴⁶

240 IND. PUB. DEF. COUNCIL, DEATH PENALTY FACTS (2015), http://www.in.gov/ipdc/public/dp_links/indianadpfactsheet.pdf.

241 Death Penalty Defense Unit (Capital Defense Coordinator): History of the Death Penalty Defense Unit, KAN. ST. BOARD INDIGENTS' DEF. SERVS., http://www.sbids.org/au_dp.html (last visited Oct. 27, 2018).

242 See Who We Are, Ky. DEP'T PUB. ADVOC., https://dpa.ky.gov/who_we_are/Pages/ default.aspx (last visited Oct. 27, 2018).

243 See LPDB Guidelines for Capital Defense, LA. PUB. DEFENDER BOARD, http://lpdb.la.gov/Supporting%20Practitioners/Capital%20Defense/

LPDB%20Guidelines%20for%20Capital%20Defense.php (last visited Oct. 27, 2018). The Capital Conflicts Office previously handled most representation.

244 See Office of Public Defender: Origin & Functions, MD. MANUAL ON-LINE, http:// msa.maryland.gov/msa/mdmanual/25ind/html/61pubdf.html (last updated Mar. 16, 2018).

245 See History, MISS. OFF. ST. PUB. DEFENDER, http://www.ospd.ms.gov/CapDef.htm (last visited Jan. 16, 2016); see also SPANGENBERG GRP., supra note 113, at 9.

246 See Capital Litigation, Mo. ST. PUB. DEFENDER, https://publicdefender.mo.gov/legaldivisions/capital-litigation/ (last visited Jan. 16, 2016).

State	Transition Year(s)	State-level Capital Defense	Notes
New Hampshire	1980	Yes	New Hampshire Public Defender handles capital cases. ²⁴⁷
New Jersey	1968*	Limited	New Jersey Office of Public Defender handled some capital cases and provided some training. ²⁴⁸
New Mexico	1973*, 2012	Yes	Law Offices of Public Defender handle capital defense. ²⁴⁹
New York	1995	Yes	Capital Defender Office provided training, screening and appointment system, and mandated \$100 hourly rate. ²⁵⁰
North Carolina	2001	Yes	Office of Indigent Defense Services provides capital defense and training for some county-appointed attorneys. ²⁵¹
Ohio	1976*, 2015*	Limited	Office of the Public Defender handles some capital defense. Commission on Appointment of Counsel in Capital Cases provides additional training and funding. ²⁵²
Oklahoma	1991*	Limited	Tulsa and Oklahoma Counties have independent public defender offices handling capital cases. ²⁵³
Oregon	1976*	Limited	Office of Public Defense Services provides funding and training for county-appointed attorneys. ²⁵⁴
Pennsylvania		No	Compensation rates for court-appointed attorneys are determined by local judges, resulting in varying levels of funding. ²⁵⁵

247 See Tristan Scott, \$1 Million Set Aside for Public Defenders Office to Handle Death Penalty Cases, MISSOULIAN (June 5, 2011), http://missoulian.com/news/local/million-set-aside-for-public-defenders-office-to-handle-death/article_aa96eaf2-8f29-11e0-b818-001cc4c002e0.

html ("The Office of the State Public Defender has not had a capital case go to trial since its formation \ldots .").

248 See Background, NEB. COMM'N ON PUB. ADVOC., http://www.ncpa.ne.gov/ (last visited Jan. 16, 2016).

249 See Nev. Sup. Ct. R. 250.

250 See About Us, N.H. PUB. DEFENDER, https://www.nhpd.org/about-us/ (last visited Dec. 26 2018).

251 See SPANGENBERG GRP., supra note 113, at 3-4; see also Joseph E. Krakora, N.J. OFF. PUB. DEFENDER, http://www.state.nj.us/defender/structure/management/joseph_krakora. shtml (last visited Jan. 16, 2016) ("As Director of Capital Litigation, Mr. Krakora handled numerous death penalty cases until the abolition of the death penalty in December 2007.").

252 See Welcome, LAW OFFS. PUB. DEFENDER, http://www.lopdnm.us/index.php (last visited Jan. 16, 2016).

253 See History, supra note 152; see also Spangenberg GRP., supra note 113, at 6.

254 See The IDS Commission and IDS Office, N.C. CT. Sys.: OFF. INDIGENT DEF. SERVS., http://www.ncids.org/IDS%20Office/What_Is_IDS.htm (last visited Jan. 16, 2016).

State	Transition Year(s)	State-level Capital Defense	Notes
South Carolina	2008	Yes	South Carolina Commission on Indigent Defense, Division of Capital Defenders handles capital defense. ²⁵⁶
South Dakota		No	Capital defense provided by county- appointed attorneys: \$78 hourly rate. ²⁵⁷
Tennessee	1997	Yes	Shelby and Davidson Counties have independent public defender offices handling capital cases. All postconviction defense provided by state. ²⁵⁸
Texas	2001*	Limited	Task Force on Indigent Defense sets training and appointment guidelines. Regional Public Defender's Office represents capital defendants in participating counties. ²⁵⁹
Utah		No	County Public Defender offices have limited ability to pull from communal funding pools. ²⁶⁰
Virginia	2004	Yes	Four state-supervised regional public defender offices handle capital defense. ²⁶¹
Washington		No	Capital defense handled by county-appointed attorneys. ²⁶²
Wyoming	1978	Yes	State Office of the Public Defender handles capital defense. ²⁶³

Note: States that outlawed the death penalty prior to 2006 are omitted.

* Legislative action yielded only limited state-level capital defense.

** Legislative action did not contribute to providing state-level capital defense.

255 See Commission on Appointment of Counsel in Capital Cases, SUP. CT. OHIO & OHIO JUD. Sys., https://www.supremecourt.ohio.gov/Boards/capitalCases/ (last visited Jan. 16, 2016).

256 See Spangenberg Grp., supra note 113, at 12.

257 See id. at 5, 8.

258 See id. at 8; see also 234 PA. CODE § 801 (2018).

259 See Capital Trial Division, S.C. COMMISSION ON INDIGENT DEF., https://www.sccid.sc.gov/about-us/capital-defenders (last visited Jan. 16, 2016).

260 See Spangenberg Grp., supra note 113, at 6.

261 See About, TENN. OFF. POST-CONVICTION DEFENDER, http://tnpcdo.net/about/ (last visited Jan. 16, 2016).

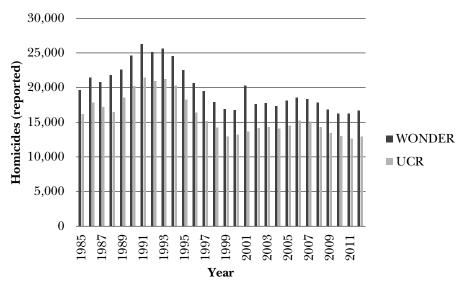
262 See Mission Statement, REGIONAL PUB. DEFENDER'S OFF., http://rpdo.org/ (last visited Oct. 27, 2018); see also Spangenberg Grp., supra note 113, at 11.

263 See Without Sufficient Funds, States are Failing to Provide Adequate Representation, DEATH PENALTY INFO. CTR., http://www.dpic.ngo/node/74 (last visited Jan. 16, 2016).

Appendix **B**

Homicide data used in this Article is developed primarily from the CDC WONDER database and supplemented by the FBI's Uniform Crime Reporting Program. The FBI data, based on voluntary reporting by law enforcement, is shown to contain 80.2% of the murders reported by the CDC. This figure is slightly lower than the 85%–90% published by the Bureau of Justice and Statistics.²⁶⁴ It is important to establish any forms of systemic bias that may impact the study. Comparison of the databases indicates no apparent temporal bias in underreporting of the homicides by the UCR database.²⁶⁵ Close scrutiny suggests minimal impact of geographic biases upon analysis of death sentencing. The states in which the UCR records most closely match WONDER data include many important states in the context of capital punishment: California, Nevada, Arizona, Maryland, and Washington. Disparities are more pronounced in some regions, but most states requiring supplemental FBI data have opted to abolish the death penalty. Since WON-DER data is available in large states throughout the time period studies, geographical disparities are especially unlikely to impact analysis.





265 See id. at 8; see also Death Penalty Representation, supra note 148.

²⁶⁴ See Spangenberg Grp., supra note 113, at 7.

Appendix C

TABLE 6: REGRESSION ANALYSIS OF STATE DEATH SENTENCING AND
HOMICIDES, ONE-YEAR LAG, 1979–2015

Ordinary	Panel model	"Mixed effects"	Poisson
,	controlling for		regression
(linear)	fixed effects	controlling for	model
regression	within states	both fixed and	
		random effects	

Note:	* Indicates significance at 0.1 level.
	** Indicates similicance at 0 001 level

** Indicat	es significance i	at 0.001 level.		
No state-level	3.48*	4.297**	4.270**	1.165**
capital	(1.76)	(0.48)	(0.46)	(0.04)
defense				
provided				
Life without	1.520	1.374**	1.334*	0.223**
parole	(2.22)	(0.32)	(0.31)	(0.02)
sentencing unavailable				
Judge	3.800*	0.594	0.820	0.361**
authority in	(1.71)	(<i>0.53</i>)	(0.50)	(<i>0.03</i>)
final				
sentencing				
phase				
Standard more in	a harmtheses			

Ordinary	Panel model	"Mixed effects"	Poisson
least squares	controlling for	model	regression
(linear)	fixed effects	controlling for	model
regression	within states	both fixed and	
-		random effects	

TABLE 7: REGRESSION ANALYSIS OF STATE DEATH SENTENCING AND
HOMICIDES, TWO-YEAR LAG, 1979–2015

Note: * Indicates significance at 0.1 level. ** Indicates significance at 0.001 level.

** Inaicate	es significance d	at 0.001 level.		
No state-level capital	3.746* (1.82)	4.201** (0.47)	4.186** (0.45)	1.155** (0.04)
defense provided	(1.02)	(0.17)	(0.12)	(0.07)
Life without	1.650	1.363**	1.354*	0.228*
parole sentencing unavailable	(2.29)	(0.31)	(0.30)	(0.02)
Judge	3.027*	0.660	0.872	0.372^{**}
authority in final sentencing phase	(1.77)	(0.52)	(0.50)	(0.03)

	Ordinary least squares (linear) regression	Panel model controlling for fixed effects within states	"Mixed effects" model controlling for both fixed and random effects	Poisson regression model	Negative binomial model
Note: * Indice ** Indi		nce at 0.1 level. Ince at 0.001 lev	vel.		
No state-	3.273*	3.999**	4.012**	1.102**	0.999**
level capital	(1.69)	(0.48)	(0.46)	(0.04)	(0.08)
defense provided					
Jury not	0.893	2.014 **	1.914**	0.333^{**}	0.160*
fully	(1.67)	(0.32)	(0.31)	(<i>0.03</i>)	(0.06)
informed of life without parole sentencing					
Judge	3.004*	0.418	0.691*	0.389**	0.333**
authority in final	(1.63)	(0.53)	(0.50)	(0.03)	(0.07)
sentencing phase					
Standard amo					

 TABLE 8: REGRESSION ANALYSIS OF STATE DEATH SENTENCING AND HOMICIDE

 TOTALS, 1979–2015, WITH 1991–2015 RESENTENCES REMOVED IN

 YEARS OF LWOP JURY INSTRUCTIONS

Ordinary least squares	Panel model controlling for	"Mixed effects" model	Poisson regression
(linear)	fixed effects	controlling for	model
regression	within states	both fixed and	
		random effects	

TABLE 9:	REGRESSION ANALYSIS OF STATE DEATH SENTENCING AND ONE-YEAR
	Lagged Homicide Rates, 1979–2015

Note: * Indicates significance at 0.1 level. ** Indicates significance at 0.001 level.

No state-level	6.502*	3.037**	3.151**	1.461**
capital defense provided	(2.90)	(0.49)	(0.49)	(0.04)
Life without	-0.332	0.608*	0.557*	-0.065*
parole sentencing unavailable	(3.72)	(0.33)	(0.32)	(0.02)
Judge	0.767	0.078	0.125	0.096^{**}
authority in final sentencing phase	(2.85)	(0.53)	(0.52)	(0.03)

Standard errors in parentheses.

TABLE 10: COMPARISON OF POISSON AND NEGATIVE BINOMIAL REGRESSIONANALYSIS OF STATE DEATH SENTENCING AND HOMICIDE RATES,1979–2015

	Poisson regression model	Negative binomial model
Note: * Indicates significance at 0.2 ** Indicates significance at 0		
No state-level capital defense provided	1.181** (0.04)	1.046** (<i>0.08</i>)
Life without parole sentencing unavailable	0.218** (<i>0.02</i>)	0.030 (<i>0.07</i>)
Judge authority in final sentencing phase	0.349** (0.03)	0.323** (<i>0.08</i>)