
OPENING KEYNOTE ADDRESS

STILL HANDCUFFING THE COPS? A REVIEW OF FIFTY YEARS OF EMPIRICAL EVIDENCE OF *MIRANDA*'S HARMFUL EFFECTS ON LAW ENFORCEMENT

PAUL G. CASSELL* & RICHARD FOWLES**

INTRODUCTION	687
I. GAUGING <i>MIRANDA</i> 'S EFFECT ON LAW ENFORCEMENT	689
A. <i>The Before-and-After Miranda Confession Rate "Impact"</i> <i>Studies</i>	691
B. <i>The "Second Generation" Miranda Studies</i>	695
1. Questioning of Adults	696
2. Questioning of Juveniles	699
C. <i>The Need to Move Beyond Confession Rates</i>	701
II. CLEARANCE RATES AS AN INDIRECT MEASURE OF <i>MIRANDA</i> 'S EFFECT ON CONFESSION RATES	702
A. <i>How Clearance Rates Could Affect Confession Rates</i>	702

* Ronald N. Boyce Presidential Professor of Criminal Law and University Distinguished Professor of Law, S.J. Quinney College of Law at the University of Utah.

** Professor, Economics Department, University of Utah.

The authors thank Al Alschuler, Shima Baradaran Baughman, Patricia Cassell, Don Dripps, Jeffrey Fagan, Amos Guiora, Susan Herman, Carissa Hessick, Cathy Hwang, Yale Kamisar, Paul Larkin, Wayne Logan, Tracey Maclin, Daniel Nagin, Mike Rappaport, Chris Slobogin, George Thomas, Charles Weisselberg, Marvin Zalman, and the participants in discussions at the S.J. Quinney College of Law at the University of Utah, Boston University School of Law, and Chase College of Law at Northern Kentucky University for helpful comments. Although this Article was a collaborative effort, Cassell had initial responsibility for data collection and legal analysis, whereas Fowles had initial responsibility for statistical analysis. Librarians Lee Warthen and Felicity Murphy, graphic designer Dana Wilson, as well as research assistants Emily Cassell, Chauncey Bird, Zach Williams, and Christopher Mitchell were also vital to the success of this project. We appreciate financial support provided by the University Research Committee of the University of Utah, as well as the Albert and Elaine Borchard Fund for Faculty Excellence.

This Article draws heavily on past articles by the authors, especially Paul G. Cassell & Richard Fowles, *Handcuffing the Cops? A Thirty-Year Perspective on Miranda's Harmful Effects on Law Enforcement*, 50 STAN. L. REV. 1055, 1059-60 (1998); and Paul G. Cassell, *Miranda's "Negligible" Effect on Law Enforcement: Some Skeptical Observations*, 20 HARV. J.L. & PUB. POL'Y 327, 331 (1997).

B.	<i>What Clearance Rates Tell Us About Miranda's Effects</i>	705
1.	The National Clearance Rate Trend	706
2.	Using Regression to Sort Through Competing Causes	710
3.	A Model of Crime Clearance Rates	714
4.	Regression Equation Results	723
C.	<i>Quantification of Miranda's Cost</i>	732
D.	<i>Explaining the Pattern</i>	732
III.	MODEL SPECIFICATION ISSUES: FURTHER ANALYSIS OF JOHN DONOHUE'S SPECIFICATIONS	736
A.	<i>The Donohue Model with Data Extended Through 2012</i>	737
B.	<i>Bayesian Model Averaging and the Cassell/Fowles and Donohue Specifications</i>	743
C.	<i>Simultaneity Issues</i>	749
IV.	DATA COLLECTION ISSUES: A RESPONSE TO FLOYD FEENEY	751
A.	<i>Data Collection Problems in the Nation's Cities</i>	752
1.	Clearance Rate Declines in the Nation's Fourteen Largest Cities	752
2.	Clearance Rate Declines in the Nation's Cities Organized by Population	760
B.	<i>California Clearance Rate Data</i>	764
V.	WHY CLEARANCE RATES WILL INHERENTLY UNDERESTIMATE MIRANDA'S COSTS	773
A.	<i>How Miranda Is Relevant to Clearance Rates</i>	774
B.	<i>Empirical Studies on Miranda's Capacity to Change Clearance Rates</i>	778
1.	A Pre-Miranda Study on Police Investigations	779
2.	Post-Miranda Studies on Police Investigations	781
a.	<i>Robbery Studies</i>	782
b.	<i>Larceny Studies</i>	785
c.	<i>Burglary Studies</i>	787
C.	<i>Miranda's Harmful Effects on Primary and Secondary Clearances</i>	788
1.	Lost Clearances as Lost Primary Clearances	789
2.	The Harm of Lost Secondary Clearances	795
D.	<i>Falling Clearance Rates as an Understated Telltale for Lost Convictions</i>	796
E.	<i>How Police Interrogation Remains Important in an Era of Advancing Forensic Science</i>	798
VI.	THE CAUSALITY QUESTION: ATTRIBUTING DECLINING CLEARANCE RATES TO MIRANDA	801
A.	<i>Contemporaneous Explanations of the Clearance Rate Decline</i>	801
B.	<i>Alternate Explanations Proposed by Feeney</i>	804
1.	Race Riots and Related Disturbances	804
2.	Increasing Heroin Use	812
C.	<i>Other Supreme Court Decisions Apart from Miranda</i>	818

D.	<i>The Implausibility of Declining Coercion as an Explanation</i>	822
E.	<i>The Logic of Miranda as a Cause</i>	824
VII.	REFORMING <i>MIRANDA</i>	827
A.	<i>Eliminating Miranda's Waiver Requirement and Questioning Cut-Off Rules</i>	828
B.	<i>Modifying Miranda's Warnings</i>	834
C.	<i>Recording of Custodial Interrogations</i>	838
D.	<i>Renewed Focus on the Voluntariness Test</i>	841
E.	<i>Fewer Costs, More Benefits Than Miranda</i>	845
	CONCLUSION	848

"I believe the decision of the Court . . . entails harmful consequences for the country at large. How serious these consequences may prove to be only time can tell. . . . The social costs of crime are too great to call the new rules anything but a hazardous experimentation."

—*Miranda v. Arizona*, 384 U.S. 436, 504, 517 (1966) (Harlan, J., dissenting).

"When we get a little distant, some things get clearer."

—THE INDIGO GIRLS, *It's Alright, on SHAMING OF THE SUN* (Epic Records 1997).

INTRODUCTION

The fiftieth anniversary of *Miranda v. Arizona*¹ offers a chance to assess how the decision has played out in the real world and, in particular, to determine whether it has harmed law enforcement. On the day the Supreme Court handed down its decision, four dissenters predicted that its price would be reduced police effectiveness in solving crimes. In dissent, Justice Harlan warned that the decision would produce social costs, the size of which "only time can tell."² Justice White, also dissenting, predicted that "[i]n some unknown number of cases the Court's rule will return a killer, a rapist or other criminal to the streets and to the environment which produced him, to repeat his crime whenever it pleases him."³

Since then, the *Miranda* warnings and the associated procedures have "become part of our national culture."⁴ But what effect have they actually had on law enforcement effectiveness? In this Article, we take advantage of the time since the *Miranda* decision—now a little more than fifty years—to see whether

¹ 384 U.S. 436, 471 (1966).

² *Id.* at 504 (Harlan, J., dissenting).

³ *Id.* at 542 (White, J., dissenting).

⁴ *Dickerson v. United States*, 530 U.S. 428, 443 (2000); accord Tracey Maclin, *The Right to Silence v. The Fifth Amendment*, 2016 U. CHI. L.F. 255, 256 (discussing entrenchment of the *Miranda* decision).

it has produced the predicted harmful consequences. In particular, we survey the available empirical evidence. We collect confession rate data, both from the time of *Miranda* and since, to assess whether *Miranda* caused confession rates to fall. We also review the Federal Bureau of Investigation (“FBI”)’s nationwide data on crime clearance rates to shed light on any changes in the ability of police to solve crimes. Building on research we first published in 1998,⁵ we capitalize on additional data and new statistical techniques to more fully assess whether *Miranda* “handcuffed the cops.”

Our focus in this Article is a quantitative one. Many academic commentators have offered their qualitative assessments regarding *Miranda*’s effects on law enforcement based on their understandings of doctrinal developments since *Miranda*. These qualitative views have generally been that *Miranda* has not harmed law enforcement.⁶ But this question is, ultimately, a quantitative one that is best assessed, if possible, quantitatively.

Our Article proceeds in eight parts. In Part I, we describe different approaches to gauging *Miranda*’s effect on law enforcement. Ideally, the issue would be approached by evaluating whether confession rates fell after the decision. The limited evidence available suggests that they did. But because only limited confession rate data exist, particularly for recent years, other measures of *Miranda*’s effects need to be examined.

In Part II, we explain why crime clearance rate data become the inevitable second-best measure for evaluating *Miranda*’s long-term effects. Specifically, we report the results of regression equations on crime clearance rates from 1950 to 2012, controlling for factors apart from *Miranda* that might be responsible for changes in clearance rates. Even controlling for these factors, we find statistically significant reductions in crime clearance rates after *Miranda* for violent and property crimes, as well as for robbery, larceny, and vehicle theft. We also quantify the number of lost clearances that appear to be due to *Miranda*.

In Part III, we take advantage of recent advances in statistical modeling to respond to the critique (advanced by John Donohue,⁷ among others) that discovering a “*MIRANDA* effect” depends on the variables that a researcher includes or excludes from regression models. Using Bayesian model averaging (“BMA”), we conclude that our findings are not generally subject to model specification problems but rather are extremely robust. Indeed, we are able to replicate many of our most important findings using Donohue’s own specifications.

⁵ Paul G. Cassell & Richard Fowles, *Handcuffing the Cops? A Thirty-Year Perspective on Miranda’s Harmful Effects on Law Enforcement*, 50 STAN. L. REV. 1055, 1059-60 (1998).

⁶ See, e.g., George C. Thomas III, *Miranda’s Spider Web*, 97 B.U. L. REV. 1215, 1233 (2017) (“The more I think about it, the more I believe that we have achieved interrogation nirvana with the current Court’s interpretation of *Miranda*.”).

⁷ John J. Donohue III, *Did Miranda Diminish Police Effectiveness?*, 50 STAN. L. REV. 1147, 1157-71 (1998).

In Part IV, we respond to arguments (raised by Floyd Feeney⁸) that the post-*Miranda* decline in crime clearance rates is some sort of statistical artifact caused by record-keeping issues or other similar problems. Here we review not only national data but also data from some of the nation's largest cities as well as from California. Properly understood, the data from all of these sources tend to confirm our hypothesis that *Miranda* shackled American law enforcement.

In Part V, we respond to another argument (again raised by Feeney⁹) that clearance rates are not responsive to *Miranda*'s restrictions. We explain that while clearance rates will inherently understate *Miranda*'s harmful effects, they could provide partial measures of these effects. We also explain that lost clearances due to *Miranda* are not confined to so-called "secondary" clearances. We conclude this Part by discussing how police interrogations remain important to law enforcement even in an era of advancing forensic science.

In Part VI, we review the reasons for believing that our 1966-to-1968 "MIRANDA effect" is attributable to significant restrictions placed on police by the *Miranda* decision rather than some other event occurring at exactly that time. We explain that police reports contemporaneous with *Miranda* pointed to the decision as a cause and that other competing potential causes do not appear to be strong candidates for explaining the pattern of clearance rate reductions we have found.

In Part VII, we present an alternative approach to regulating police interrogation that would ameliorate *Miranda*'s harmful effects on law enforcement while protecting suspects from unconstitutional coercion. In particular, we propose that the *Miranda* warnings-and-waiver procedure be modified so as to avoid giving suspects the option to block all police questioning. We also propose that, in exchange for these modified rules, police should be required to record custodial interrogations. This alternative reduces *Miranda*'s harms to law enforcement while better protecting suspects from abusive questioning.

In Part VIII, we briefly conclude by encouraging the Supreme Court, as well as commentators and policy makers, to consider alternative ways of regulating police interrogation that do not have such detrimental effects on police efforts to apprehend potentially dangerous criminals.

I. GAUGING *MIRANDA*'S EFFECT ON LAW ENFORCEMENT

How are we to assess Justice Harlan's prediction that *Miranda* would produce social costs the size of which "only time can tell"?¹⁰ Accurately and quantitatively measuring *Miranda*'s effect on law enforcement is no simple matter. We start from the premise that because *Miranda* imposed new rules restricting police interrogation, its direct effect would be changes in the results

⁸ Floyd Feeney, *Police Clearances: A Poor Way to Measure the Impact of Miranda on the Police*, 32 RUTGERS L.J. 1, 18-41 (2000).

⁹ *Id.* at 42-60.

¹⁰ *Miranda v. Arizona*, 384 U.S. 436, 504 (1966) (Harlan, J., dissenting).

of those interrogations—i.e., changes (presumably a reduction) in the number of confessions that police obtain from suspects. This confession rate decline (if any) is the initial subject of interest. Any such decline might then have additional collateral effects, such as possible reductions in the clearance rate (i.e., the rate at which police solve crimes) because *Miranda* causes police to gain less information from criminals about crimes they may have committed, or causes reductions in convictions because prosecutors lack evidence they need to persuade juries to convict suspects.

While the approach to measuring *Miranda*'s effects through confession rate changes is theoretically straightforward, the empirical information needed for such an assessment is unfortunately hard to come by. When *Miranda* was decided, law enforcement agencies did not regularly track the percentage of cases in which suspects confessed. In fact, they still do not. Interestingly, the *Miranda* decision itself rested on no direct evidence or empirical studies of how police questioned suspects.¹¹

One would think that in the fifty years since the decision, social scientists and legal scholars of an empirical bent would have collected data on *Miranda*'s real world impact. But little research has been done in this area. Indeed, writing in 1988, Richard Uviller aptly described us as living in an "empirical desert" with regard to hard data¹²—a characterization that still is largely accurate.¹³

This lack of data has left some scholars free to speculate that *Miranda*'s harmful effects must have diminished over time. For instance, Steven Duke has written that while *Miranda* might permit some suspects to block questioning entirely, *Miranda* might also lead other suspects to confess by "sound[ing] chords of fairness and sympathy at the outset of the interrogation."¹⁴ Duke goes on to "speculate . . . that after four decades of living with *Miranda*, the small number of suspects who are induced to remain silent by the administration of the warnings is getting even smaller while the number encouraged to talk is at least remaining stable."¹⁵

Duke's speculation is, of course, theoretically possible. But what does the (limited) empirical evidence tell us about *Miranda*'s effects, both at the time of the decision and more recently? In this Part, we consider two empirical measures of *Miranda*'s possible harmful effects on law enforcement: (1) the before-and-

¹¹ Barry C. Feld, *Behind Closed Doors: What Really Happens When Cops Question Kids*, 23 CORNELL J.L. & PUB. POL'Y 395, 412 (2013).

¹² H. RICHARD UVILLER, *TEMPERED ZEAL: A COLUMBIA LAW PROFESSOR'S YEAR ON THE STREETS WITH THE NEW YORK CITY POLICE 198-99* (1988). Not much data existed before *Miranda* either. *See Miranda*, 384 U.S. at 501 (Clark, J., dissenting) (describing the "almost total lack of empirical knowledge on the practical operation of requirements truly comparable to those announced by the majority").

¹³ *See* Feld, *supra* note 11, at 398 ("Despite the importance of interrogation, we know remarkably little about what actually happens when police question suspects.").

¹⁴ Steven B. Duke, *Does Miranda Protect the Innocent or the Guilty?*, 10 CHAP. L. REV. 551, 559 (2007).

¹⁵ *Id.* at 560.

after studies of confession rate changes conducted at the time of *Miranda*; and (2) a “second generation” of studies on confession rate changes conducted in the decades following *Miranda*.

A. *The Before-and-After Miranda Confession Rate “Impact” Studies*

In the months and years immediately following *Miranda*, researchers attempted to collect information on *Miranda*’s impact on confession rates (and, to a lesser extent, clearance rates). The studies of most interest for quantifying *Miranda*’s costs are the before-and-after “impact” studies—i.e., studies of single cities in which scholars collected data on confessions before *Miranda* and after *Miranda* to see if anything changed.

One of this Article’s authors, Paul Cassell, collected these studies in a 1996 *Northwestern University Law Review* article.¹⁶ The article presents data from ten general studies (and an eleventh dealing with homicide crimes only) in which researchers gathered before-and-after information about confession rates in the United States.¹⁷ Unfortunately, for some of the studies, there were major problems in methodology that prevented any useful information from being derived from them. Discarding data from the studies with major problems, Cassell concluded that the remaining studies showed a confession rate reduction of 16.1%—i.e., there was a confession rate change, or “delta,” of 16.1 percentage points following *Miranda*, as shown in Table 1.¹⁸

¹⁶ Paul G. Cassell, *Miranda’s Social Costs: An Empirical Reassessment*, 90 NW. U. L. REV. 387, 417 (1996).

¹⁷ *Id.* at 395-418.

¹⁸ *Id.* at 416-18 tbl.1.

Table 1. Estimates of Changes in the Confession Rate Due to *Miranda*

City	Confession Rate Before	Confession Rate After	Change	Major Problems?
Pittsburgh	48.5%	29.9%	-18.6%	-
New York County	49.0%	14.5%	-34.5%	-
Philadelphia	45% (est./der.)	20.4% (der.)	-24.6%	-
"Seaside City"	68.9%	66.9%	-2.0%	?
New Haven-1960-66	58-63% (est.)	48.2%	-10-15% (est.)	Yes
New Haven-calculated	?	?	-16.0%	-
Washington, D.C.	21.5% (der.)	20.0% (der.)	-1.5%	Yes
Kansas City	?	?	-6% (der.)	?
Kings County	45% (est./der.)	29.5% (der.)	-15.5%	-
New Orleans	40% (est.)	28.2%	-11.8%	?
Chicago (homicides)	53% (der.)	26.5% (der.)	-26.5%	?
Los Angeles	40.4%	50.2%	+9.8%	Yes
Average of Studies Without Major Problems	-	-	-16.1%	-

Est. = estimated

Der. = derived

It is possible to take the 16.1 percentage point delta in confession rates and derive a measure of lost convictions. Collecting all the relevant data on the importance of confessions to convictions, Cassell concluded that a confession is required to convict in about 23.8% of all cases.¹⁹ Multiplying these two figures, the article concluded that *Miranda* led to loss of a conviction in about 3.8% of all cases—or a total loss of about 28,000 cases for violent crimes and 79,000 cases for property crimes (extrapolated across 1993 crime data, the most recent then available).²⁰

These conclusions were not universally accepted. Stephen Schulhofer wrote a response, questioning which studies should be deemed reliable and how the lost confessions should be calculated. Recalculating a confession rate drop by excluding some of the studies used by Cassell and including one excluded by Cassell (the Los Angeles study), Schulhofer ultimately concluded that *Miranda*'s impact on law enforcement was "vanishingly small"—i.e., a confession rate drop of not 16.1%, but rather between 6.7% and 9.1%.²¹ Cassell responded at length to Schulhofer's criticisms in another article.²²

Since then, various scholars have kibitzed on the Cassell-Schulhofer debate offering their views on who "won." For example, two scholars sympathetic to

¹⁹ *Id.* at 434 tbl.2.

²⁰ *Id.* at 440.

²¹ Stephen J. Schulhofer, *Miranda's Practical Effect: Substantial Benefits and Vanishingly Small Social Costs*, 90 NW. U. L. REV. 500, 538-47 (1996).

²² See generally Paul G. Cassell, *All Benefits, No Costs: The Grand Illusion of Miranda's Defenders*, 90 NW. U. L. REV. 1084 (1996).

Miranda's approach (George Thomas and Richard Leo) regarded Schulhofer's response as a "decisive refutation"²³ of the claim that *Miranda* harmed law enforcement. But another scholar, Chris Slobogin, has pointed out that, even accepting Schulhofer's recalculation of the confession rate changes at face value, the figures would still show that *Miranda* noticeably harmed police efforts to obtain confessions.²⁴ Moreover, many of the kibitzers confined their attention to the three original articles written by Cassell, Schulhofer, and then Cassell in turn. Many of them did not notice another paper by Cassell that shed important light on the debate.

The quantitatively single most significant difference between Cassell's and Schulhofer's positions on confession rates was whether to include a figure from the Los Angeles District Attorney's Office reporting that the confession rate in Los Angeles *rose* ten percentage points in the three weeks after *Miranda*—allegedly from about 40% before the decision to about 50% after.²⁵ Cassell excluded the Los Angeles figure as unreliable, finding the increase to be an outlier from all the other studies (which showed clearance rate declines) and concluding that it was far-fetched to believe that confessions from suspects dramatically increased within three weeks of the decision.²⁶ Cassell thought the survey result was attributable not to some sudden rise in the loquaciousness of criminal suspects, but rather to a problem with the survey instruments.²⁷ Cassell explained that the Los Angeles prosecutors received an "after" questionnaire that had been redesigned so that it swept in more statements (including nonincriminating statements) than did the "before" questionnaire.²⁸ In response to Cassell, Schulhofer characterized the Los Angeles effort as "[a] careful study"²⁹ and claimed that Cassell's disparagement rested only on the "'summary sheets' used by the law clerk who subsequently tabulated these questionnaires," not the questionnaires themselves.³⁰ Schulhofer further argued that there was no indication that the law clerk recorded different things in the before and after surveys or even that the forms were redesigned.³¹ Schulhofer ultimately concluded that the Los Angeles number was "one of the least vulnerable" to criticism of the figures available for analysis.³²

²³ George C. Thomas III & Richard A. Leo, *The Effects of Miranda v. Arizona: "Embedded" in Our National Culture?*, 29 CRIME & JUST. 203, 240 (2002).

²⁴ Christopher Slobogin, *An Empirically Based Comparison of American and European Regulatory Approaches to Police Investigation*, 22 MICH. J. INT'L L. 423, 448 (2001).

²⁵ See Cassell, *supra* note 22, at 1097-98.

²⁶ *Id.* at 1097-101.

²⁷ *Id.* at 1098 ("The underlying methodology renders the study unusable.").

²⁸ *Id.* at 1097-101.

²⁹ Stephen J. Schulhofer, *Pointing in the Wrong Direction*, LEGAL TIMES, Aug. 12, 1996, at 21.

³⁰ Schulhofer, *supra* note 21, at 535.

³¹ *Id.*

³² *Id.* at 538.

To resolve the competing perspectives on the study, Cassell tracked down the law clerk who tabulated the data—United States Court of Appeals Judge Trott.³³ As discussed in a later article, directly contrary to Schulhofer’s assessment of the situation, Judge Trott reported that his collection of both the before and after data was “extremely haphazard” and that he paid little, if any, attention to securing representative samples or consistent survey instruments.³⁴ The forms were completed and collected under “chaotic” conditions and “ended up measuring apples and oranges.”³⁵ No controls were maintained over who was given the forms and who completed them; many prosecutors simply ignored them.³⁶ Judge Trott stated that he reported these and other problems to his supervisors at the time, suggesting that the whole process was badly flawed.³⁷ His supervisors replied that, because nothing else was available, the data collected would have to be used.³⁸ Judge Trott concluded that the Los Angeles figures “prove nothing” and that researchers should “not draw any conclusions” about *Miranda*’s effects from them.³⁹

Later reviewers of the Cassell-Schulhofer debate siding with Schulhofer (such as Thomas and Leo, writing elsewhere) need to explain why they continue to cite the Los Angeles study with favor⁴⁰ and, more broadly, why they believe that a post-*Miranda* confession-rate-decline figure is rendered more accurate by

³³ Paul G. Cassell, *Miranda’s “Negligible” Effect on Law Enforcement: Some Skeptical Observations*, 20 HARV. J.L. & PUB. POL’Y 327, 331 (1997).

³⁴ *Id.* at 331-32.

³⁵ *Id.* at 331.

³⁶ *Id.*

³⁷ *Id.* at 331-32.

³⁸ *Id.* at 332.

³⁹ *Id.*

⁴⁰ See, e.g., Thomas & Leo, *supra* note 23, at 237. Curiously, Thomas had previously written that he “reject[ed] out of hand” using the Los Angeles data in determining *Miranda*’s effects on police. George C. Thomas III, *Plain Talk About the Miranda Empirical Debate: A “Steady-State” Theory of Confessions*, 43 UCLA L. REV. 933, 942 (1996).

Writing in this Symposium, Albert Alschuler opines that “Schulhofer had the better of the argument on most points [in the debate] but not all.” Albert W. Alschuler, *Miranda’s Fourfold Failure*, 97 B.U. L. REV. 849, 882 (2017). Alschuler then specifically discusses only two points in the debate. Alschuler agrees with Cassell that the Los Angeles study was “appropriately disregarded.” *Id.* at 884 n.157. Alschuler goes on to argue, however, contrary to Cassell’s position (and also contrary to the position of others, see, for example, Stephen J. Markman, *The Fifth Amendment and Custodial Questioning: A Response to “Reconsidering Miranda,”* 54 U. CHI. L. REV. 938, 946-47 (1987)), and consistent with Schulhofer’s position, that the New York County study should be disregarded. Alschuler, *supra*, at 884 n.157. According to Alschuler, the inclusion/exclusion of these two studies “appeared to explain most of the difference in their conclusions.” *Id.* But in fact, following Alschuler’s apparent view of the debate and excluding both the Los Angeles and New York County studies produces an average post-*Miranda* confession rate decline of 13%, not much lower than Cassell’s calculated decline of 16.1%, but well above Schulhofer’s 6.7%.

including the obviously flawed Los Angeles data. But ultimately, it is hard to do much more with the before-and-after studies than conclude that they establish a tentative range on the immediate, post-*Miranda* confession rate decline. For example, citing Cassell's and Schulhofer's assessments, a 2005 report by the National Research Council of the National Academy of Sciences could do little more than conclude that the "[s]ummaries of *Miranda* effect studies suggest that the warning as it is actually delivered may have resulted in a reduction in confessions of between 4 and 16 percent."⁴¹

B. *The "Second Generation" Miranda Studies*

A more serious problem surrounding the before-and-after studies is that they were conducted around 1966. *Miranda*'s defenders can argue that the studies all reported data within a year or two of the decision, and thus do not offer a current perspective on *Miranda*'s impact.⁴² Recent articles by *Miranda*'s academic defenders have claimed that cops later "learned to live" with *Miranda*⁴³—and, more particularly, that police have learned techniques for working around the *Miranda* rules.⁴⁴ These developing techniques have eliminated, the argument goes, any harmful effect that *Miranda* may have initially had.⁴⁵

What do the later empirical studies actually show about *Miranda*'s more recent impact? Here we begin to encounter the "empirical desert" problems noted earlier.⁴⁶ There are surprisingly few "second generation" *Miranda* studies,

⁴¹ NAT'L RESEARCH COUNCIL OF THE NAT'L ACAD. OF SCIS., FAIRNESS AND EFFECTIVENESS IN POLICING: THE EVIDENCE 256-57 (Wesley Skogan & Kathleen Frydl eds., 2004).

⁴² See, e.g., Thomas & Leo, *supra* note 23, at 245-46 (arguing that even if *Miranda* had an immediate impact on law enforcement, that impact diminished over time).

⁴³ See, e.g., CHARLES FRIED, ORDER AND LAW: ARGUING THE REAGAN REVOLUTION—A FIRSTHAND ACCOUNT 45 (1991); Charles Weisselberg & Stephanos Bibas, Debate, *The Right to Remain Silent*, 159 U. PA. L. REV. PENNUMBRA 69, 77-81 (2010).

⁴⁴ Tonja Jacobi, *Miranda 2.0*, 50 U.C. DAVIS L. REV. 1, 16 (2016) ("Nowadays, the police are used to *Miranda* and no longer consider it a major hurdle to their investigative techniques.").

⁴⁵ See, e.g., Duke, *supra* note 14, at 560 ("[A]fter four decades of living with *Miranda*, the small number of suspects who are induced to remain silent by the administration of the warnings is getting even smaller while the number encouraged to talk is at least remaining stable."); Kit Kinports, *The Supreme Court's Love-Hate Relationship with Miranda*, 101 J. CRIM. L. & CRIMINOLOGY 375, 440 (2011) (noting that "the multiple ways in which the police have adapted to and accommodated *Miranda* over the years and the overwhelming rate of *Miranda* waivers" have perhaps rendered *Miranda* "a dead letter"); Richard A. Leo & Welsh S. White, *Adapting to Miranda: Modern Interrogators' Strategies for Dealing with the Obstacles Posed by Miranda*, 84 MINN. L. REV. 397, 433-39 (1999) (concluding that investigators are "often" able to overcome *Miranda*'s obstacles to successful interrogation); Charles D. Weisselberg, *Mourning Miranda*, 96 CALIF. L. REV. 1519, 1592 (2008) ("As a prophylactic device to protect suspects' privilege against self-incrimination, I believe that *Miranda* is largely dead.").

⁴⁶ See Feld, *supra* note 11, at 398 (discussing the lack of available empirical studies

as authors in this Symposium and others have acknowledged.⁴⁷ But, properly read, these “second generation” studies provide further support for the view that *Miranda* initially harmed law enforcement—and continues to harm law enforcement. In this Section, we first discuss the post-*Miranda* studies on police questioning of adult suspects, and then turn to questioning of juvenile suspects.

1. Questioning of Adults

One (imperfect) way to attempt to assess the continuing validity of the before-and-after studies would be to compare confession rates before *Miranda* with confession rates after. Unfortunately, we have only limited information on confession rates, but what little we do have suggests confession rates have remained depressed since *Miranda*.

The project of comparing confession rates across time must be approached with some caution. Unlike the before-and-after studies just discussed, a comparison across time may not compare apples-to-apples in a single jurisdiction. Instead, the comparison involves taking the confession rates reported in particular studies in particular cities before *Miranda* and then comparing them to later-conducted studies in other cities after *Miranda*. This potentially involves an apples-to-oranges comparison if the cities being compared are not similarly situated. In addition, because the various pre- and post-*Miranda* studies have been conducted by different researchers, they may apply different definitions and methodologies. For example, a “confession” rate is likely to be much lower than an “incriminating statement” rate—and different researchers may have applied different definitions to determine these rates. Different researchers may also have collected their data at different points in the criminal justice process. A researcher collecting data by watching police interrogations actually conducted, for example, will necessarily miss cases in which the police did not question anyone—presumably producing a higher confession rate than a sample that collects data on suspects who have not been questioned.

With these caveats in mind, first consider what the pre-*Miranda* interrogation rate was. Although broad generalizations are hazardous, before *Miranda*, confession rates in this country were probably somewhere around 55% to 65%.⁴⁸

analyzing what occurs in interrogation rooms).

⁴⁷ See, e.g., *id.* at 416-17; Thomas & Leo, *supra* note 23, at 238-39; see also Christopher Slobogin, *Manipulation of Suspects and Unrecorded Questioning: After Fifty Years of Miranda Jurisprudence, Still Two (or Maybe Three) Burning Issues*, 97 B.U. L. REV. 1157, 1163-64, 1182-87 (2017) (discussing lack of reliable research of various interrogation techniques).

⁴⁸ Paul G. Cassell & Bret S. Hayman, *Police Interrogation in the 1990s: An Empirical Study of the Effects of Miranda*, 43 UCLA L. REV. 839, 871 (1996); see also CHRISTOPHER SLOBOGIN, CRIMINAL PROCEDURE: REGULATION OF POLICE INVESTIGATION: LEGAL, HISTORICAL, EMPIRICAL AND COMPARATIVE MATERIALS 6 (Supp. 1995) (concluding that a 64% confession rate is “comparable to pre-*Miranda* confession rates”). But cf. Thomas, *supra* note 40, at 935-36 (deriving a lower estimate of the pre-*Miranda* confession rate with which

The earliest academic study in this country reported confession rates of 88.1% and 58.1% in two cities in California in 1960.⁴⁹ Similarly, a 1961 survey in Detroit reported a 60.8% confession rate, which fell slightly to 58% in 1965.⁵⁰ In New Haven, the confession rate was about 58% to 63% in 1960.⁵¹ These figures deserve special attention in calculating a pre-*Miranda* confession rate, because they avoid the problem of “anticipatory” implementation of *Miranda* in various jurisdictions. In particular, confession rates after June 1964 might have been dampened by the Supreme Court’s decision in *Escobedo v. Illinois*,⁵² which led some police to adopt *Miranda*-style procedures even before the *Miranda* decision.⁵³ The available data from the before-and-after studies, discussed earlier in this Article,⁵⁴ also show confession rates immediately before *Miranda* and can be factored in.

Next let’s consider the available data on confession rates in this country after *Miranda*. Although broad generalizations are hazardous here as well, these studies generally report confession rates lower than the 55% to 65% pre-*Miranda* rate. A 1977 study of six cities reported a confession rate of 40.3%.⁵⁵ A 1979 National Institute of Justice study conducted by Floyd Feeney and two colleagues in Jacksonville, Florida and San Diego, California reported confession rates of 32.9% and 19.5% respectively and, adding in statements admitting being at the scene, overall statement rates of 51.3% and 35.1% respectively.⁵⁶

The two most recent studies of adult confession rates in this country were done in the 1990s. In 1993, Leo examined police interrogations in Berkeley, California. Leo found an in-custody questioning success rate by detectives of 64%.⁵⁷ Leo’s “success” percentage, when adjusted so as to be comparable to

to compare studies).

⁴⁹ Edward L. Barrett, Jr., *Police Practices and the Law—From Arrest to Release or Charge*, 50 CALIF. L. REV. 11, 43-44 (1962).

⁵⁰ Theodore Souris, *Stop and Frisk or Arrest and Search—The Use and Misuse of Euphemisms*, 57 J. CRIM. L. CRIMINOLOGY & POLICE SCI. 251, 264 (1966).

⁵¹ Cassell, *supra* note 16, at 406 (discussing Michael Wald et al., *Interrogations in New Haven: The Impact of Miranda*, 76 YALE L.J. 1519, 1573, 1644 (1967)).

⁵² 378 U.S. 478, 490-91 (1964).

⁵³ Cassell, *supra* note 16, at 403 (noting that the confession rate fell in Philadelphia after *Escobedo*, and fell again after a pre-*Miranda* decision from the U.S. Court of Appeals for the Third Circuit); *see also* Cassell, *supra* note 22, at 1101-04 (discussing *Escobedo*’s effect on confession rates).

⁵⁴ *See supra* notes 16-18 and accompanying text.

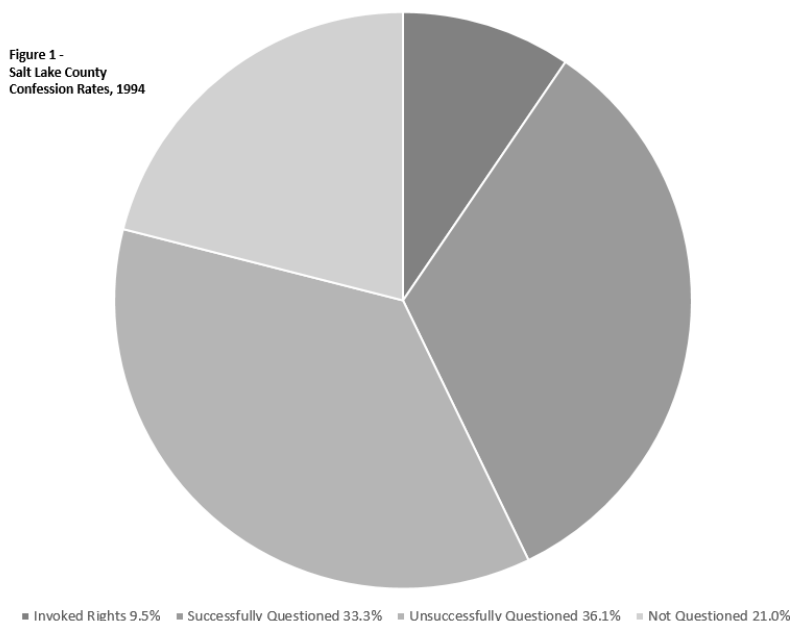
⁵⁵ Gary D. LaFree, *Adversarial and Nonadversarial Justice: A Comparison of Guilty Pleas and Trials*, 23 CRIMINOLOGY 289, 298 tbl.2 (1985).

⁵⁶ FLOYD FEENEY, FORREST DILL & ADRIANNE WEIR, DEP’T OF JUSTICE, ARRESTS WITHOUT CONVICTION: HOW OFTEN THEY OCCUR AND WHY 142-43 (1983) (reporting confession and admission rates).

⁵⁷ Richard Angelo Leo, *Police Interrogation in America: A Study of Violence, Civility and Social Change* 270 (Aug. 1994) (unpublished Ph.D. dissertation, University of California at

earlier studies, by accounting for suspects not questioned and the greater efficacy of questioning by detectives of suspects in custody, translates into an overall confession rate of about 39%.⁵⁸

Remarkably, the most current study of adult confession rates dates back more than two decades to 1994, when one of the present authors (Cassell, joined by his colleague, Bret Hayman) collected data from Salt Lake County, Utah.⁵⁹ Cassell and Hayman reported an overall incriminating statement rate of only 33.3%—comprised of 21.5% confessions and 11.9% incriminating statements—as shown in Figure 1.⁶⁰



Since the Leo and Cassell/Hayman studies of the mid-1990s, it appears that essentially no empirical work has been done in this country to determine overall confession rates of adults.⁶¹

Berkeley) (on file with authors) [hereinafter Leo, *Police Interrogation in America*]. Leo later published his dissertation, in part, in two articles. See generally Richard A. Leo, *Inside the Interrogation Room*, 86 J. CRIM. L. & CRIMINOLOGY 266 (1996) [hereinafter Leo, *Inside the Interrogation Room*]; Richard A. Leo, *The Impact of Miranda Revisited*, 86 J. CRIM. L. & CRIMINOLOGY 621 (1996) [hereinafter Leo, *The Impact of Miranda Revisited*].

⁵⁸ See Cassell & Hayman, *supra* note 48, at 926-30 (discussing Leo, *Police Interrogation in America*, *supra* note 57, at 255-68). For criticism of the downward adjustment of Leo's figures, see Thomas, *supra* note 40, at 953-54.

⁵⁹ Cassell & Hayman, *supra* note 48, at 850.

⁶⁰ *Id.* at 869.

⁶¹ We have located one study that reported "confession" rates. The study examined child

Taken together, the limited data suggest that confession rates from the years after *Miranda* are lower than confession rates from the years before *Miranda*, implying that *Miranda* has in fact impeded law enforcement.⁶² For example, the Leo success figure (adjusted) and the Cassell/Hayman incriminating statement figure are both below 40%—which appears to be lower than most of the pre-*Miranda* figures. But as with the before-and-after studies, the second-generation data can be criticized because they rest on studies from individual cities that may not be generalizable across the country.⁶³ And the data are also growing stale, because no new data have been collected in the last twenty years.

2. Questioning of Juveniles

One last source of confession rate data remains to be considered. Several recent studies have been conducted regarding police questioning of juvenile offenders. While these studies tend to show high confession rates, they cannot be directly compared to studies of adults because of juveniles' high waiver and confession rates.

A 2005 study by Jodi Viljoen found that juvenile delinquents (including pre-adolescent juveniles) retrospectively reported a confession rate of approximately 55.3%.⁶⁴

sex abuse cases from 1997 to 2000 and reported "confession" rates of between 19% and 37%, although it did not provide much information about the source of those figures. Margaret-Ellen Pipe et al., *Factors Associated with Nondisclosure of Suspected Abuse During Forensic Interviews*, in *CHILD SEXUAL ABUSE: DISCLOSURE, DELAY, AND DENIAL* 77, 92 (Margaret-Ellen Pipe et al. eds., 2007).

Some qualitative research has been conducted, which shows that police officers use various techniques to minimize the importance of *Miranda* waivers to suspects. See, e.g., DAVID SIMON, *HOMICIDE: A YEAR ON THE KILLING STREETS* 102 (1991). These studies can be read to show that *Miranda* remains of concern to police because it illustrates how hard police work to prevent suspects from "lawyering up." But for purposes of quantitatively determining an interrogation success rate, these studies are of little use.

⁶² See Cassell & Hayman, *supra* note 48, at 871-76. Writing in this Symposium, Alschuler argues that it is impossible to ensure exact comparability between the Salt Lake County data and earlier studies. Alschuler, *supra* note 40, at 884. While this point is surely true, it is possible to try and reach some general comparisons, and Cassell and Hayman have "shown their math" so that anyone who disagrees with their calculations can simply make appropriate adjustments. See Cassell & Hayman, *supra* note 48, at 926-30. Alschuler also suggests that it is unclear how *Miranda* could have caused a reduction in confessions given the relatively limited number of suspects who invoked their rights in the Salt Lake County study. Alschuler, *supra* note 40, at 884. But, in fact, there are several possible mechanisms, including the possibility that *Miranda* forced police to move questioning to relatively less productive, noncustodial settings. See Cassell & Hayman, *supra* note 48, at 881-85.

⁶³ See Thomas, *supra* note 40, at 954-56 (raising this possibility).

⁶⁴ Jodi L. Viljoen, Jessica Klaver & Ronald Roesch, *Legal Decisions of Preadolescent and Adolescent Defendants: Predictors of Confessions, Pleas, Communication with Attorneys, and Appeals*, 29 *LAW & HUM. BEHAV.* 253, 261 (2005).

Barry Feld has conducted the most detailed juvenile studies. In 2006, Feld collected video recordings contained in prosecutors' files of police questioning of sixty-three sixteen- and seventeen-year-old suspects.⁶⁵ He found that "80% of the juveniles waived their *Miranda* rights."⁶⁶ He further found that the juveniles confessed and admitted all the elements of the offense in less than one-fifth of the cases (17%), but "provided some statements of evidentiary value in about half (53%) of the cases."⁶⁷

In 2013, Feld extended his research by publishing his analysis of recordings from 307 files in which police questioned juveniles.⁶⁸ In this sample, 92.8% of the juveniles waived *Miranda*.⁶⁹ He further found that a majority (58.6%) of the juveniles confessed.⁷⁰ In addition, about one-third (29.8%) provided statements of some evidentiary value to police.⁷¹

Finally, the most recent quantitative study of police interrogation in this country appears to be one conducted by Hayley Cleary based on videotapes of a sample of fifty-eight youths from across the country, including both custodial and noncustodial questioning.⁷² The juveniles interviewed were on average fifteen and a half years old.⁷³ Of this sample of juveniles, 37% fully confessed to the allegations, 31% made incriminating admissions—a success rate of 68%—while 24% denied the charges, and 7% went unresolved.⁷⁴

This research on juveniles generally shows high confession rates, but the confession rate figures cannot be directly compared to the adult studies discussed above. Unlike the studies noted above, these studies involved suspects who had already been charged with crimes or who had already been interrogated, among other features likely to inflate confession rates.⁷⁵ But the most

⁶⁵ Barry C. Feld, *Police Interrogation of Juveniles: An Empirical Study of Policy and Practice*, 97 J. CRIM. L. & CRIMINOLOGY 219, 250, 288-95 (2006).

⁶⁶ *Id.* at 255-56.

⁶⁷ *Id.* at 286.

⁶⁸ Feld, *supra* note 11, at 399. See generally BARRY C. FELD, KIDS, COPS, AND CONFESSIONS: INSIDE THE INTERROGATION ROOM (2013); Barry C. Feld, *Questioning Gender: Police Interrogation of Delinquent Girls*, 49 WAKE FOREST L. REV. 1059 (2014) [hereinafter Feld, *Questioning Gender*]; Barry C. Feld, *Real Interrogation: What Actually Happens When Cops Question Kids*, 47 LAW & SOC'Y REV. 1 (2013).

⁶⁹ Feld, *supra* note 11, at 429.

⁷⁰ *Id.* at 440.

⁷¹ *Id.* at 442.

⁷² Hayley M. D. Cleary, *Police Interviewing and Interrogation of Juvenile Suspects: A Descriptive Examination of Actual Cases*, 38 LAW & HUM. BEHAV. 271, 273-76 (2014).

⁷³ *Id.* at 275.

⁷⁴ *Id.* at 280.

⁷⁵ See Cleary, *supra* note 72, at 279-81 (noting that all recordings involved suspects who had waived *Miranda* and that because the study was based on recordings mailed to researchers, caution is warranted in generalizing from the study's findings because it is not apparent how the agencies selected the recordings); Feld, *supra* note 11, at 420 (noting that the 307 juvenile cases studied reflect sample selection bias because they all involved charged

fundamental reason these juvenile studies cannot be compared to studies of adult suspects is that they involve, by construction, juveniles. It appears that juveniles waive rights more readily than do adults.⁷⁶ In addition, juveniles are more likely to confess than adults.⁷⁷ The extent of these distortions is not known, and therefore it is not possible to compare these juvenile studies to the adult studies described above.

C. *The Need to Move Beyond Confession Rates*

In this Section, we collected every scrap of hard data we could find in this country⁷⁸ about confession rates both before and after *Miranda*—the one direct

cases, more serious delinquents, cases more likely to go to trial, and perhaps more juveniles who waived *Miranda*); Feld, *supra* note 65, at 287 n.207 (noting that Cassell and Hayman attributed a higher confession rate to certain studies due to exclusion of suspects not questioned, exclusion of noncustodial questioning, and inclusion of only questioning conducted by detectives); Viljoen, Klaver & Roesch, *supra* note 64, at 255 (studying already-detained suspects).

⁷⁶ Feld, *supra* note 11, at 429 (“Juveniles waive *Miranda* at higher rates than do adults—around 90%.”); A. Bruce Ferguson & Alan Charles Douglas, *A Study of Juvenile Waiver*, 7 SAN DIEGO L. REV. 39, 53 (1970) (reporting that over 90% of juveniles interrogated waived their rights, perhaps due to lack of understanding); J. Thomas Grisso & Carolyn Pomicter, *Interrogation of Juveniles: An Empirical Study of Procedures, Safeguards, and Rights Waiver*, 1 LAW & HUM. BEHAV. 321, 339 (1977) (finding that juveniles invoked their rights in about 9% to 11% of cases compared with 40% for adults); Thomas Grisso & Melissa Ring, *Parents’ Attitudes Toward Juveniles’ Rights in Interrogation*, 6 CRIM. JUST. & BEHAV. 211, 214 (1979) (noting the Grisso and Pomicter study in which 90% of juveniles complied with police requests). See generally THOMAS GRISSE, INSTRUMENTS FOR ASSESSING UNDERSTANDING & APPRECIATION OF MIRANDA RIGHTS (1998).

⁷⁷ See Marty Beyer, *Immaturity, Culpability & Competency in Juveniles: A Study of 17 Cases*, CRIM. JUST., Summer 2000, at 26, 28-33 (identifying various reasons for why juveniles might be particularly responsive to questioning); Thomas Grisso, *Juveniles’ Capacities to Waive Miranda Rights: An Empirical Analysis*, 68 CALIF. L. REV. 1134, 1160-62 (1980) (discussing that juveniles are less likely to understand the adverse consequences of confessing); cf. J. Pearse et al., *Police Interviewing and Psychological Vulnerabilities: Predicting the Likelihood of a Confession*, 8 J. COMMUNITY & APPLIED SOC. PSYCHOL. 1, 9-10 (1998) (finding English suspects under the age of twenty-five more likely to confess than English suspects over the age of twenty-five). The available evidence also suggests that police do not question juveniles with less aggressive techniques than adults. See Hayley M. D. Cleary & Todd C. Warner, *Police Training in Interviewing and Interrogation Methods: A Comparison of Techniques Used with Adult and Juvenile Suspects*, 40 LAW & HUM. BEHAV. 270, 276 (2016) (finding that data suggest that officers use a variety of techniques, including those “considered to be more aggressive or manipulative,” in similar ways when questioning both adults and juveniles).

⁷⁸ Another paper is underway which will attempt to discuss foreign confession rate data. See generally Paul G. Cassell, *Further Evidence That Miranda Is Handcuffing the Cops: A Comparison of American and Selected Foreign Confession and Clearance Rates* (Feb. 23, 2017) (unpublished manuscript) (on file with authors).

measure of *Miranda*'s effect on law enforcement. We have offered our reasons for believing that both the "impact" studies and the later "second generation" studies support the conclusion that *Miranda* harmed law enforcement. But we have also noted that these conclusions are subject to criticism for various reasons. Responding to such criticisms is difficult because it is quite true that existing data on confession rates are limited (having been collected in only a handful of cities) and are now beginning to show some age.

Given that the existing empirical research on confession rates has not resolved the question of whether *Miranda* has hampered law enforcement over the long haul, the question arises as to whether any alternative approach can be pursued. Ideally we would want a measure (1) that is consistently collected, as opposed to a patched-together comparison, (2) that reflects the entire country rather than just a few individual cities, and (3) that extends into current years rather than several decades past. Whether such a measure can be found is the subject of the next Section.

II. CLEARANCE RATES AS AN INDIRECT MEASURE OF *MIRANDA*'S EFFECT ON CONFESSION RATES

A. *How Clearance Rates Could Affect Confession Rates*

Since regularly collected, long-term data on confession rates are unavailable, we must search for a second-best alternative. The strongest candidate for such a statistic is the crime "clearance" rate, i.e., the rate at which police "clear" or solve crimes. Since at least 1950, the FBI has collected clearance rate figures from around the country and reported them annually in its Uniform Crime Reports ("UCR").⁷⁹ Because of this extended range of data, clearance rates might permit a long-term perspective on *Miranda*'s effects.

The clearance rate appears to be a reasonable (if understated) surrogate measure for the confession rate.⁸⁰ Sometimes police officers, lacking evidence to clear a case, will bring a suspect in, deliver *Miranda* warnings, interrogate, and—if no confession results—release him, leaving the police officers with insufficient evidence to clear the case.⁸¹ If *Miranda* prevented the confession,

⁷⁹ See, e.g., U.S. DEP'T OF JUSTICE, FED. BUREAU OF INVESTIGATION, CRIME IN THE UNITED STATES 2015 [hereinafter UCR-[year]]. Crime clearance rates for 1950 to 1974 are helpfully collected in JAMES ALAN FOX, FORECASTING CRIME DATA: AN ECONOMETRIC ANALYSIS 83-86 tbl.A-1 (1978).

⁸⁰ See RICHARD A. LEO, POLICE INTERROGATION AND AMERICAN JUSTICE 30 (2008) ("[C]onfessions allow detectives to 'clear' crimes (i.e., close the file and classify the case as solved by arrest) . . ."); GERALD N. ROSENBERG, THE HOLLOW HOPE: CAN COURTS BRING ABOUT SOCIAL CHANGE? 328 (1991) ("[O]ne of the ways in which police are often evaluated is through the 'clearance' rate One of the major ways this occurs is through confessions."). For an explanation of how clearance rates understate the effect on confessions, see *infra* notes 364-525 and accompanying text.

⁸¹ Obtaining statistics on the frequency of such interrogations is difficult. See Cassell & Fowles, *supra* note 5, at 1063 n.38 (collecting the available data).

by discouraging the suspect from talking or otherwise, the crime may never be cleared. As the leading police interrogation manual explains, “[m]any criminal cases, even when investigated by the best qualified police departments, are capable of solution only by means of an admission or confession from the guilty individual or upon the basis of information obtained from the questioning of other criminal suspects.”⁸² Field research on police interrogations found that “virtually every detective . . . insisted that more crimes are solved by police interviews and interrogations than by any other investigative method.”⁸³ And Leo’s book on police interrogations reports “that police solve more crimes with interrogation-induced confessions than they do with virtually any other type of evidence.”⁸⁴

Interrogation of a suspect for one crime may also lead to a confession of a more serious crime. For example, a drug dealer might be interrogated about a narcotics offense and end up confessing to a homicide.⁸⁵ Confessions are also sometimes necessary to solve multiple crimes committed by the same perpetrator. For example, even if police can arrest and convict a robber for one robbery, without a confession, they may not be able to clear four other robberies the robber also committed.⁸⁶

In the first several decades following *Miranda*, clearance rates were generally viewed as a statistic that would reveal *Miranda*’s effects—particularly by *Miranda*’s defenders.⁸⁷ For example, Stephen Schulhofer’s influential 1987 article praising *Miranda* claimed that while some of the before-and-after studies suggested declining confession rates after *Miranda*, “within a year or two . . . [clearance rates] were thought to be returning to pre-*Miranda* levels.”⁸⁸

⁸² FRED E. INBAU ET AL., CRIMINAL INTERROGATION AND CONFESSIONS, at xii (5th ed. 2013).

⁸³ Leo, Police Interrogation in America, *supra* note 57, at 376.

⁸⁴ LEO, *supra* note 80, at 187.

⁸⁵ See Graham C. Ousey & Matthew R. Lee, *To Know the Unknown: The Decline in Homicide Clearance Rates, 1980-2000*, 35 CRIM. JUST. REV. 141, 153 (2010).

⁸⁶ See Wald et al., *supra* note 51, at 1595 (giving examples of such clearances). The issue of multiple clearances from a single arrest is discussed at greater length below. See *infra* notes 454-501 and accompanying text.

⁸⁷ See, e.g., Richard H. Seeburger & R. Stanton Wettick, Jr., *Miranda in Pittsburgh—A Statistical Study*, 29 U. PITT. L. REV. 1, 20 (1967) (discussing clearance rates as a measure of *Miranda*’s effects); James W. Witt, *Non-Coercive Interrogation and the Administration of Criminal Justice: The Impact of Miranda on Police Effectuality*, 64 J. CRIM. L. & CRIMINOLOGY 320, 330-31 (1973) (same); cf. Yale Kamisar, *On the Tactics of Police-Prosecution Oriented Critics of the Courts*, 49 CORNELL L.Q. 436, 466-67 (1964) (discussing claims by critics that the Supreme Court’s decision in *Mallory v. United States* reduced clearance rates by restricting D.C. police questioning).

⁸⁸ Stephen J. Schulhofer, *Reconsidering Miranda*, 54 U. CHI. L. REV. 435, 456 (1987) [hereinafter Schulhofer, *Reconsidering Miranda*] (linking the supposedly rebounding clearance rates to the notion that *Miranda* “posed no barrier to effective law enforcement”); see also Stephen J. Schulhofer, *The Fifth Amendment at Justice: A Reply*, 54 U. CHI. L. REV.

Many other *Miranda* supporters argued that post-*Miranda* clearance rates demonstrated that *Miranda* had only benign effects.⁸⁹ Accordingly, we head down the path of investigating clearance rates as a measure of *Miranda*'s effects because *Miranda*'s defenders suggested it.⁹⁰

While a possible consensus exists that clearance rates at least partially gauge *Miranda*'s impact, one note of caution should be sounded. As we discuss at greater length below,⁹¹ police can record a crime as "cleared" when they have identified the perpetrator and placed him under arrest, even where the evidence is insufficient to convict, or even to indict. Therefore, clearance rates are a quite conservative measure of *Miranda*'s harmful effects on the conviction of criminals.

In theory, one could begin to measure the understatement of *Miranda*'s harms by measuring the rate at which cleared cases are later charged. If confession rates fell after *Miranda*, prosecutors might charge fewer suspects because the lack of a confession made the prosecution more difficult.⁹² This theoretical possibility is, in practice, a moot point because of the lack of charging data. The FBI's data on charging decisions are woefully inadequate for statistical analysis, swinging wildly from year to year during the 1960s.⁹³ The FBI stopped reporting charging figures in the 1970s.⁹⁴

950, 954 & n.17 (1987) [hereinafter Schulhofer, *Fifth Amendment*] (arguing that apparently steady clearance rates, coupled with other evidence, refute the notion that *Miranda* has harmed law enforcement).

⁸⁹ See SPECIAL COMM. ON CRIMINAL JUSTICE IN A FREE SOC'Y, AM. BAR ASS'N, CRIMINAL JUSTICE IN CRISIS 63-64 n.53 (1988) (collecting evidence, including clearance rates, that *Miranda* has not harmed law enforcement); Welsh S. White, *Defending Miranda: A Reply to Professor Caplan*, 39 VAND. L. REV. 1, 18 n.93, 19 n.99 (1986) (citing clearance and confession rates to argue *Miranda* did not harm law enforcement); cf. Leo, *The Impact of Miranda Revisited*, *supra* note 57, at 645 (suggesting that *Miranda* has not significantly affected crime clearance rates, although "in some instances," clearance rates may have dropped).

⁹⁰ Curiously, Alschuler, writing in this Symposium, criticizes our decision to rely on clearance rates as a measure of *Miranda*'s effects. Alschuler, *supra* note 40, at 885. But that criticism should be directed at others, such as Schulhofer, who proposed the idea in the first instance.

⁹¹ See *infra* notes 366-69 and accompanying text.

⁹² See Cassell & Hayman, *supra* note 48, at 908-09 tbl.15 (finding a statistically significant difference in prosecutorial charging decisions between suspects who were successfully interrogated and those who were not).

⁹³ Compare UCR-1965, *supra* note 79, at 103 tbl.12 (noting that 50,980 persons were charged with violent crimes, derived by summing four violent crime categories), and UCR-1966, *supra* note 79, at 104 tbl.16 (noting that 44,641 persons were charged with violent crimes, derived by summing four violent crime categories), with UCR-1967, *supra* note 79, at 109 tbl.16 (noting that 41,515 persons were charged with violent crimes, derived by summing four violent crime categories).

⁹⁴ Cassell & Fowles, *supra* note 5, at 1065.

One other theoretical possibility for measuring *Miranda*'s impact would be to investigate conviction rates. Convictions have the advantage of resting on presumably more reliable court adjudications of actual guilt or innocence.⁹⁵ However, conviction rates would probably miss many of *Miranda*'s effects.⁹⁶ Conviction rates typically rest on percentages of prosecutions that end in conviction, and thus miss cases in which the evidence is too slim to warrant a prosecution. More significant, conviction rate data in this country are notoriously bad.⁹⁷ The basic problem is that police agencies, the source for FBI data, are poorly situated to report on ultimate court outcomes. Perhaps for this reason, the FBI stopped reporting conviction rate figures in 1978.⁹⁸ The Bureau of Justice Statistics has since picked up the task and currently reports some conviction rate data for the nation's seventy-five largest counties.⁹⁹ But because that series does not extend back to the time of *Miranda*, it is of no use for present purposes. Through a process of elimination, then, the choice for a long-term evaluation of *Miranda* boils down to the understated measure of clearance rates.

B. *What Clearance Rates Tell Us About Miranda's Effects*

In this Section, we analyze what the available FBI clearance rate data tell us about *Miranda*'s effects on law enforcement. We begin by looking at national crime clearance rate trends, which show clear downward movement in the several years immediately following *Miranda*. We then turn to the issue of whether those trends can be explained by other things going on during the late 1960s, such as rising crime rates. The standard tool for sorting through such issues is multiple regression analysis. We develop a model of crime clearance rates that includes potential confounding variables, and then report the results of our regression analysis on clearance rates. Our equations suggest that the sharp downward trends in clearance rates immediately after *Miranda* cannot be explained by the other factors conventionally understood to affect crime clearances.

⁹⁵ See Monica A. Walker, *Do We Need a Clear-Up Rate?*, 2 POLICING & SOC'Y 293, 304 (1992) (suggesting that in England and Wales, conviction data are better than clearance data because they rest on known offenders as opposed to suspects).

⁹⁶ See Cassell, *supra* note 16, at 396-98 (discussing why conviction rates cannot show how *Miranda* hinders the investigative process).

⁹⁷ See Isaac Ehrlich & George D. Brower, *On the Issue of Causality in the Economic Model of Crime and Law Enforcement: Some Theoretical Considerations and Experimental Evidence*, 77 AM. ECON. REV. (PAPERS & PROC.) 99, 104 (1987) (finding conviction rate data "highly questionable").

⁹⁸ See Cassell & Fowles, *supra* note 5, at 1066 & n.53.

⁹⁹ See BRIAN A. REAVES, U.S. DEP'T OF JUSTICE, NCJ 243777, STATE COURT PROCESSING STATISTICS: FELONY DEFENDANTS IN LARGE URBAN COUNTIES, 2009—STATISTICAL TABLES 1 (2013).

1. The National Clearance Rate Trend

Did clearance rates fall after *Miranda*? Before 1998, the conventional academic wisdom was that *Miranda* had no noticeable effect on crime clearance rates.¹⁰⁰ That wisdom was perhaps most prominently embodied in Stephen Schulhofer's 1987 article, "Reconsidering *Miranda*," which argued that clearance rates "were thought to be returning to pre-*Miranda* levels" shortly after the decision and that "[s]tudy after study confirmed this trend."¹⁰¹ Although Schulhofer was forced to later repudiate his position,¹⁰² his 1987 article was cited repeatedly as proof that *Miranda* had not hampered law enforcement. For example, Yale Kamisar, perhaps *Miranda*'s leading academic supporter and a keynote speaker in this Symposium, wrote that Schulhofer's article "effectively refutes [the] contention" that *Miranda* has harmed law enforcement.¹⁰³ Other scholars likewise relied on Schulhofer's assessment of clearance rate data to rebut claims that *Miranda* had handcuffed the cops.¹⁰⁴

While scholars such as Schulhofer were happily citing clearance rate theory to defend *Miranda*, they had not collected any actual data. For example, Schulhofer's footnotes referenced only two studies with clearance rate data.¹⁰⁵ Neither of these studies provided support for the thesis that clearance rates have returned to pre-*Miranda* levels.¹⁰⁶ Indeed, the few other statistical analyses of post-*Miranda* clearance rates that existed suggest that clearance rates fell. In New York City, in February 1967, the Deputy Commissioner of the New York

¹⁰⁰ See Leo, *The Impact of Miranda Revisited*, *supra* note 57, at 645-46 (concluding that the proposition that *Miranda* "has exercised only a negligible effect on the ability of police to elicit confessions [and] solve crimes . . . ha[s] become the conventional wisdom among scholars").

¹⁰¹ Schulhofer, *Reconsidering Miranda*, *supra* note 88, at 456.

¹⁰² See Stephen J. Schulhofer, *Miranda and Clearance Rates*, 91 NW. U. L. REV. 278, 278-80 (1996) (arguing that while clearance rates did, in fact, decline after *Miranda*, the decline was due to other factors apart from *Miranda*).

¹⁰³ Yale Kamisar, *Remembering the "Old World" of Criminal Procedure: A Reply to Professor Grano*, 23 U. MICH. J.L. REFORM 537, 586-87 n.164 (1990).

¹⁰⁴ See Cassell & Fowles, *supra* note 5, at 1066 n.57.

¹⁰⁵ Schulhofer, *Reconsidering Miranda*, *supra* note 88, at 456 n.52 ("Elsewhere declining confession rates were noted at first, but within a year or two, both clearance and conviction rates were thought to be returning to pre-*Miranda* levels. Study after study confirmed this trend."); see also Schulhofer, *Fifth Amendment*, *supra* note 88, at 954 n.17 ("Apparently, this is seldom the case because, as my article stressed, falling confession rates have not significantly reduced clearance and conviction rates.").

¹⁰⁶ One of the studies found exactly the opposite of Schulhofer's claim. See NEAL A. MILNER, *THE COURT AND LOCAL LAW ENFORCEMENT: THE IMPACT OF MIRANDA* 217 (1971) (finding substantial decreases in clearance rates in early 1967 in three of four Wisconsin cities). The other study, the Pittsburgh study, offered mixed results, noting at one point that "there has been a decline in the clearance rate from the first half of 1966. One of several possible explanations for this is the imposition of the *Miranda* requirements on the Pittsburgh police." Seeburger & Wettick, *supra* note 87, at 24.

Police Department (“NYPD”) reported that clearance rates dropped about 10% in 1966.¹⁰⁷ He attributed the drop, “in part, to recent Supreme Court decisions that had limited the admissibility of confessions in court.”¹⁰⁸ In “Seaside City,” California, which is defined as “an eight-square-mile enclave in the Los Angeles metropolitan area,” crime clearance rates dropped about 3% in the three years immediately after *Miranda*.¹⁰⁹

Remarkably, as of the mid-1990s, no one had carefully examined the FBI’s national data on crime clearance rates to see whether they had been affected by *Miranda*.¹¹⁰ We set out to change that with several articles we published around 1998.¹¹¹ Contrary to the implications of *Miranda*’s defenders, the national data from the FBI’s Uniform Crime Reports showed that, in fact, crime clearance rates fell sharply all over the country immediately after *Miranda* and have remained at these lower levels ever since. In 1965, the year preceding *Miranda*, the UCR noted that the national clearance rate for the “grand total” crimes¹¹² was “virtually unchanged from 1964.”¹¹³ In June of the following year, the Supreme Court handed down its *Miranda* opinion. At the end of 1966, the UCR (which usually describes police performance in decidedly upbeat terms) acknowledged a substantial drop in clearances.¹¹⁴ Indeed, the UCR observed that the drop in clearance rates from 1965 to 1966 was equal to the entire drop in clearance rates from 1961 to 1965.¹¹⁵ The 1966 drop in clearances was “universally reported by all population groups and by all geographic divisions.”¹¹⁶ In the following year, 1967, the UCR continued to report

¹⁰⁷ See Bernard Weinraub, *Crime Reports Up 72% Here in 1966; Actual Rise Is 6.5%*, N.Y. TIMES, Feb. 21, 1967, at A1. New York City data on clearance rates at the time of *Miranda* is discussed at greater length at *infra* notes 252-90 and accompanying text.

¹⁰⁸ Weinraub, *supra* note 107, at A1.

¹⁰⁹ Witt, *supra* note 87, at 322, 330-31; see also Cassell & Fowles, *supra* note 5, at 1067 & n.62 (collecting other information on reports of post-*Miranda* clearance rate changes).

¹¹⁰ Research on many aspects of clearance rates is generally lacking. See Marc Riedel, *Homicide Arrest Clearances: A Review of the Literature*, 2 SOC. COMPASS 1145, 1147-48 (2008).

¹¹¹ See, e.g., Cassell & Fowles, *supra* note 5, at 1057-60.

¹¹² The FBI’s national clearance rate accounted for “grand total” crimes. Cassell & Fowles, *supra* note 5, at 1133. This included the UCR’s seven “index crimes” (i.e., murder, rape, robbery, assault, burglary, larceny \$50 and over, and auto theft) as well as negligent manslaughter and larceny under \$50. *Id.*

¹¹³ UCR-1965, *supra* note 79, at 18 (citing a 24.6% clearance rate for “grand total” crimes and a 26.3% clearance rate for index crimes).

¹¹⁴ See UCR-1966, *supra* note 79, at 27 (“Whereas police, nationally, cleared 26.3 percent of [Crime Index] offenses in 1965, in 1966 this dropped to 24.3 percent. The decrease was noted in every Crime Index offense with robbery solutions having the sharpest decline, down 14 percent.”).

¹¹⁵ *Id.*

¹¹⁶ *Id.*

widespread bad news.¹¹⁷ Again a clearance rate drop was “universally reported by all population groups and by all geographic divisions.”¹¹⁸ In 1968, the UCR acknowledged another fall in clearance rates.¹¹⁹ In 1969, the UCR reported that most clearance rates declined slightly,¹²⁰ and in 1970, the UCR reported that clearance rates were unchanged.¹²¹ Clearance rates have remained roughly the same since 1970.

A long-term perspective on clearance rates comes from plotting the FBI’s annual figures. Figure 2 depicts the national crime clearance rate from 1950 to 2012 for violent crimes (i.e., nonnegligent homicides, forcible rapes, aggravated assaults, and robberies).

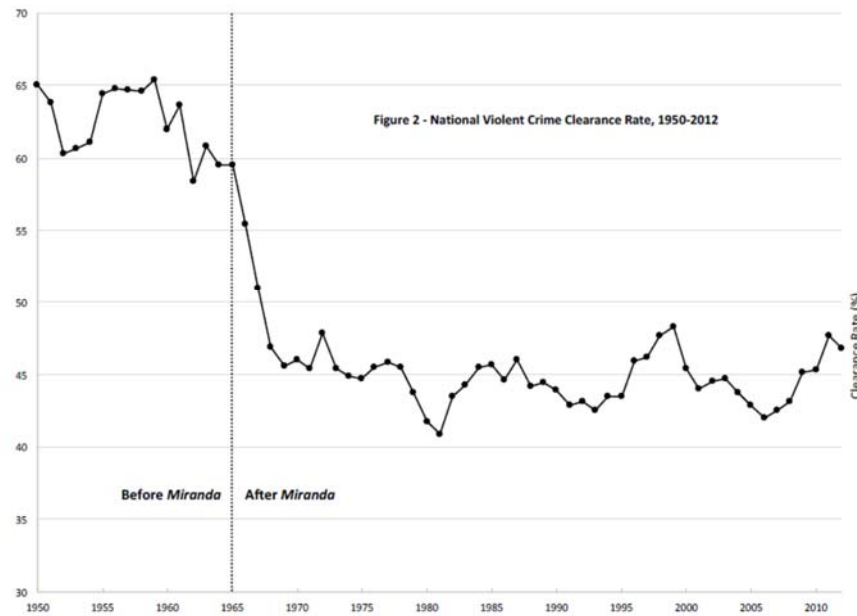
¹¹⁷ See UCR-1967, *supra* note 79, at 30 (“Whereas police nationally cleared 24.3 percent of these offenses in 1966, this dropped to 22.4 percent in 1967. The decrease was noted in every Crime Index offense with auto theft solutions having the sharpest decline . . .”).

¹¹⁸ *Id.*

¹¹⁹ See UCR-1968, *supra* note 79, at 30 (“Whereas police nationally cleared 22.4 percent of these offenses in 1967, this dropped to 20.9 percent in 1968. The decrease was noted in every Crime Index offense.”).

¹²⁰ See UCR-1969, *supra* note 79, at 28 (“Whereas police nationally cleared 20.9 percent of these offenses in 1968, this dropped to 20.1 percent in 1969. This decrease was noted in every Crime Index offense except murder and forcible rape.”).

¹²¹ See UCR-1970, *supra* note 79, at 30 (“Law enforcement agencies in the nation cleared 20 percent of Index Crimes during 1970. It is to be noted this is the same percentage of clearances as experienced during 1969.”).



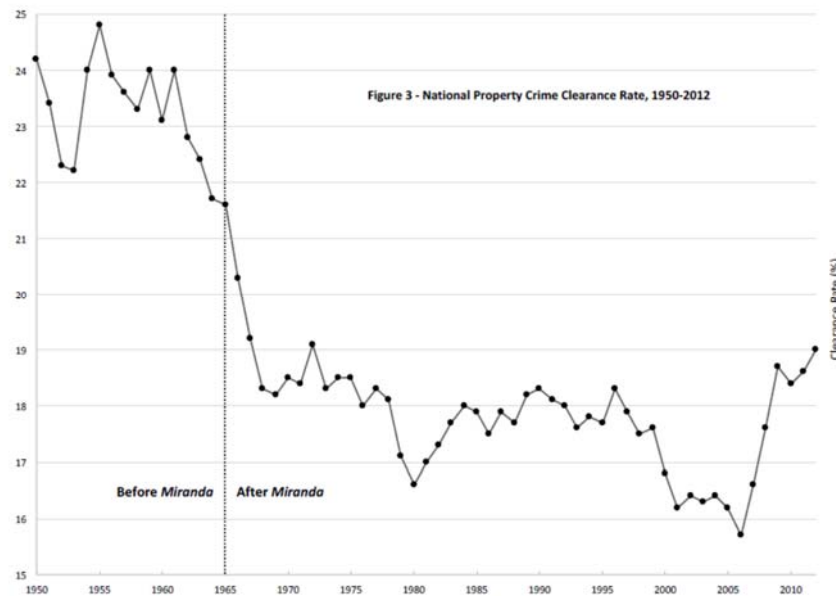
As can be seen, violent crime clearance rates were fairly stable from 1950 to 1965, generally hovering above 60%. They even increased slightly from 1962 to 1965. Then, in the three years following *Miranda*, the rates fell dramatically—to 55% in 1966, to 51% in 1967, and to 47% in 1968.¹²² Violent crime clearance rates have hovered around 45% ever since. Because *Miranda* probably took effect over several years—while both police practices and suspect volubility adjusted to the new rules¹²³—simple visual observation of the long-term trends suggests that *Miranda* substantially harmed police efforts to solve violent crimes. Moreover, contrary to the notion that clearance rates returned to pre-*Miranda* levels,¹²⁴ violent crime clearance rates in fact have been permanently depressed since the decision.

¹²² To be clear, 1965 is the last pre-*Miranda* data point, as indicated by the vertical line marked between “Before *Miranda*” and “After *Miranda*.” Because the FBI figures are reported annually, the 1966 number is the first to reflect *Miranda*’s effects.

¹²³ See *infra* notes 181-83 and accompanying text.

¹²⁴ See Schulhofer, *Reconsidering Miranda*, *supra* note 88, at 456.

A similar pattern appears in property crime clearance rates, as shown in Figure 3.



As with violent crimes, the property crime data suggest that clearance rates fell sharply immediately after *Miranda* and have remained at lower rates ever since.

2. Using Regression to Sort Through Competing Causes

A more thorough analysis of the hypothesis that *Miranda* caused the declines in crime clearance rates must contend with other competing causes. If another factor—call it the “X factor”—caused clearance rates to fall in the years 1966 to 1968, then *Miranda* would be absolved of responsibility.¹²⁵

The standard technique for sorting through such competing possibilities is multiple regression analysis. In 1998, we published an initial multiple regression analysis of the clearance rate data available at the time.¹²⁶ In this Article, we extend our earlier multiple regression equations for crime clearance rates, relying on the additional data that have appeared since then as well as on additional statistical tools that have become available to address issues related to both parameter and model uncertainty.

¹²⁵ See Stephen J. Schulhofer, *Bashing Miranda Is Unjustified—And Harmful*, 20 HARV. J.L. & PUB. POL’Y 347, 364-72 (1997); Schulhofer, *supra* note 102, at 280-85.

¹²⁶ See generally Cassell & Fowles, *supra* note 5.

The statistical technique we use is an interrupted time series design. Specifically, we analyze whether, controlling for other relevant factors, there was a detectable change in clearance rates at the time of *Miranda*. Before diving into the complexities of multiple regression equations, however, one important point must be emphasized. Although sophisticated econometric techniques are available for analyzing the data, simple visual observation has its place as well.¹²⁷ The graphs in the previous Section demonstrate that there was a sharp, post-*Miranda* drop in clearance rates, and that overall picture nicely fits the handcuffing-the-cops theory advanced by *Miranda*'s critics. We wonder whether the many defenders of *Miranda* who concluded that the decision had no adverse effects on the basis of a posited stable post-*Miranda* clearance rate¹²⁸ will now, consistent with their methodological approach, rethink their position and agree that *Miranda* was indeed harmful to police efforts.

We turn to time series analysis of national data out of necessity, because the *Miranda* decision precludes the use of other common statistical techniques. The preferred methodology for assessing a social policy is experiment design, in which two jurisdictions (at a minimum) are compared, one that is subject to the new policy with another "control" jurisdiction that is not.¹²⁹ Unfortunately, such research is not possible with *Miranda*. On June 13, 1966, the Supreme Court required all jurisdictions across the country to follow the prescribed interrogation procedures.¹³⁰ Since then, police agencies have generally followed the *Miranda* requirements with little deviation.¹³¹ Comparison of a control group

¹²⁷ See Gary A. Mauser & Richard A. Holmes, *An Evaluation of the 1977 Canadian Firearms Legislation*, 16 EVALUATION REV. 603, 604 (1992) ("Although unsophisticated, a visual inspection has the advantage of being able to assess trends across time, so that possible links . . . may be identified."); Stephen Rushin & Griffin Edwards, *De-Policing*, 102 CORNELL L. REV. 721, 759 n.183 (2017) (noting that a visual "analysis of raw trends [in criminal justice data] can be useful"). See generally COREY L. LANUM, VISUALIZING GRAPH DATA (2017). Various scholars have illustrated this technique. See Cassell & Fowles, *supra* note 5, at 1071 n.80; see also Albert W. Alschuler, *Studying the Exclusionary Rule: An Empirical Classic*, 75 U. CHI. L. REV. 1365, 1365-69 (2008) (praising the simple before-and-after assessments made in Dallin H. Oaks, *Studying the Exclusionary Rule in Search and Seizure*, 37 U. CHI. L. REV. 665 (1970)).

¹²⁸ See *supra* notes 100-04 and accompanying text.

¹²⁹ Rushin & Edwards, *supra* note 127, at 740 ("The preferred methodology for assessing a social policy' is an analysis which involves 'a true experiment in which one jurisdiction at random is subjected to the new policy, while another 'control' jurisdiction is not.'" (quoting Cassell & Fowles, *supra* note 5, at 1072)); see also Stephanie R. deLusè & Sanford L. Braver, *A Rigorous Quasi-Experimental Design to Evaluate the Causal Effect of a Mandatory Divorce Education Program*, 53 FAM. CT. REV. 66, 69 (2015) (comparing a group of couples enrolled in an education program with another comparable "control" group of couples not enrolled in the education program); Daniel E. Ho & Donald B. Rubin, *Credible Causal Inference for Empirical Legal Studies*, 7 ANN. REV. L. & SOC. SCI. 17, 20 (2011) (collecting illustrations of this approach).

¹³⁰ *Miranda v. Arizona*, 384 U.S. 436, 469, 488-89 (1966).

¹³¹ See Paul G. Cassell, *The Costs of the Miranda Mandate: A Lesson in the Dangers of*

with a subject group is thus not possible. Indeed, it seems fair to number among *Miranda*'s costs the fact that the "constitutionalization" of police integration law has prevented controlled experimentation in this area.¹³²

We also used time series analysis because another similar and commonly used statistical technique, cross-sectional or panel analysis, is unavailable to us.¹³³ In this "quasi-experimental" technique, the impact of legal rules is analyzed state-by-state, where data from states following one legal regime are compared with data from states that do not follow that regime.¹³⁴ For example, one of us (Richard Fowles) recently conducted a detailed analysis of the changes in (among other things) motorcycle helmet laws in various states to determine whether these legal changes reduced motorcycle fatalities,¹³⁵ and has previously conducted analyses of varying state speed limits and drunk driving laws on vehicle fatalities.¹³⁶ When investigating *Miranda*'s effects, however, despite what Schulhofer has previously suggested,¹³⁷ it would make no sense to apply a state-by-state methodology. No "control" jurisdictions unaffected by *Miranda* exist. As Stephen Rushin and Griffin Edwards have explained: "[W]hen the U.S. Supreme Court handed down transformational regulations of American law

Inflexible, "Prophylactic" Supreme Court Inventions, 28 ARIZ. ST. L.J. 299, 311 (1996) (noting the reluctance of police agencies to explore alternatives to *Miranda*).

¹³² See Cassell & Hayman, *supra* note 48, at 922 (concluding that *Miranda* prevented research on important interrogation questions).

¹³³ See generally MARC NERLOVE, *ESSAYS IN PANEL DATA ECONOMETRICS* 1-70 (2002) (discussing the history of panel data econometrics).

¹³⁴ See, e.g., Abhay Aneja, John J. Donohue III & Alexandria Zhang, *The Impact of Right-to-Carry Laws and the NRC Report: Lessons for the Empirical Evaluation of Law and Policy*, 13 AM. L. & ECON. REV. 565, 566 (2011) (discussing JOHN R. LOTT, JR., *MORE GUNS, LESS CRIME* (2d ed. 2000)); Raymond A. Atkins & Paul H. Rubin, *Effects of Criminal Procedure on Crime Rates: Mapping Out the Consequences of the Exclusionary Rule*, 46 J.L. & ECON. 157, 167-68 (2003) (describing the parameters of a cross-sectional analysis regarding the effects of *Mapp v. Ohio* on crime rates); Nadia Greenhalgh-Stanley & Shawn Rohlin, *How Does Bankruptcy Law Impact the Elderly's Business and Housing Decisions?*, 56 J.L. & ECON. 417, 425 (2013) ("In order to identify and isolate the causal effect of bankruptcy law, we use both a cross-sectional and a panel approach.").

¹³⁵ See generally Richard Fowles & Peter D. Loeb, *Sturdy Inference: A Bayesian Analysis of U.S. Motorcycle Helmet Laws*, 55 J. TRANSP. RES. F. 41 (2016) (finding that the existence of universal motorcycle helmet laws reduced fatalities from motorcycle crashes).

¹³⁶ Gail Blattenberger, Richard Fowles & Peter D. Loeb, *Determinants of Motor Vehicle Crash Fatalities Using Bayesian Model Selection Methods*, 43 RES. TRANSP. ECON. 112, 115-16 (2013); see also Gail Blattenberger, Richard Fowles, Peter D. Loeb & Wm. A. Clarke, *Understanding the Cell Phone Effect on Vehicle Fatalities: A Bayesian View*, 44 APPLIED ECON. 1823, 1823-24 (2012) (analyzing the effects of certain factors on motor vehicle fatality rates using panel data and classical regression analysis).

¹³⁷ See Cassell & Fowles, *supra* note 5, at 1072 (noting Schulhofer's suggestion of a state-by-state "cross-sectional" analysis approach to research *Miranda*, but also noting that one of Schulhofer's citations for the proposition that this is an "almost invariable" practice is, in fact, a national time series analysis similar to ours).

enforcement like *Miranda* . . . , their decisions bound all state and local law enforcement agencies equally. This made it impossible for researchers to compare a police agency burdened by *Miranda* . . . with a similarly situated police department unburdened by these decisions over the same time period,”¹³⁸ at least in this country.¹³⁹ Moreover, as a practical matter, obtaining appropriate cross-sectional data for the variables in our equations appears to be impossible, and such data, as it exists, might be contaminated by other problems.¹⁴⁰

In any event, interrupted time series analysis is quite appropriate for assessing the effect of a legal reform.¹⁴¹ This statistical technique is commonly used to

¹³⁸ Rushin & Edwards, *supra* note 127, at 726 n.5. In theory, such research might be possible if some jurisdictions followed *Miranda* rules before the decision and some did not. Then it would be possible to compare changes in these differing groups. *See, e.g.*, Atkins & Rubin, *supra* note 134, at 158 (arguing that because some states already had an exclusionary rule when the Supreme Court imposed one in *Mapp v. Ohio*, a control group exists for statistical analysis); Abraham N. Tennenbaum, *The Influence of the Garner Decision on Police Use of Deadly Force*, 85 J. CRIM. L. & CRIMINOLOGY 241, 247-48, 255-56 (1994) (supplementing national interrupted time series data with state comparison data); *see also* Scott DeVito & Andrew W. Jurs, “Doubling-Down” for Defendants: The Pernicious Effects of Tort Reform, 118 PENN ST. L. REV. 543, 583-84 (2014) (using fixed effects analysis in time series analysis of tort reform); Benjamin Steiner & Emily Wright, *Assessing the Relative Effects of State Direct File Waiver Laws on Violent Juvenile Crime: Deterrence or Irrelevance?*, 96 J. CRIM. L. & CRIMINOLOGY 1451, 1460-64 (2006) (using a quasi-experimental multiple interrupted time series design by finding similar states to use as controls in time series analysis); *cf.* Matthew Desmond, Andrew V. Papachristos & David S. Kirk, *Police Violence and Citizen Crime Reporting in the Black Community*, 81 AM. SOC. REV. 857, 862 (2016) (using interrupted time series analysis on police 911 calls with various control comparisons via nonequivalent and nonaffected dependent variables); Andrew Jurs & Scott DeVito, *The Stricter Standard: An Empirical Assessment of Daubert’s Effect on Civil Defendants*, 62 CATH. U. L. REV. 675, 677-88 (2013) (comparing state adoption of rules on expert witness testimony after federal adoption of *Daubert* compared to state adoption of rules before federal adoption of *Daubert*). However, such possibilities are unavailable to us here. Before *Escobedo v. Illinois*, 378 U.S. 478 (1964), no state had adopted anything approaching the full set of *Miranda* rules. Even during the 1964 to 1966 period, only a few states moved in the direction of *Miranda*, and they did not impose all of the *Miranda* rules. *Miranda v. Arizona*, 384 U.S. 436, 519-20 n.17, 521 (1966) (Harlan, J., dissenting) (collecting cases and concluding that no “State [has] chosen to go nearly so far on its own”); *see also* Cassell, *supra* note 16, at 493-96 (discussing efforts to warn suspects after *Escobedo* and concluding that the largest drop in confession rates came from *Miranda*’s novel imposition of waiver requirements).

¹³⁹ It might be possible to compare American confession rates with overseas confession rates. *See supra* note 78.

¹⁴⁰ *See* Cassell & Fowles, *supra* note 5, at 1073 & nn.90-91.

¹⁴¹ D.J. Pyle & D.F. Deadman, *Assessing the Impact of Legal Reform by Intervention Analysis*, 13 INT’L REV. L. & ECON. 193, 213 (1993) (“Legal reform should be an area in which intervention analysis is widely used.”); *see also* Anthony Biglan, Dennis Ary & Alexander C. Wagenaar, *The Value of Interrupted Time-Series Experiments for Community Intervention Research*, 1 PREVENTION SCI. 31, 31 (2000) (“Time-series designs enable the development of

assess the effects of legal changes.¹⁴² Standard statistical texts suggest that this technique is well suited for such issues, provided that care is used in analyzing the data and other factors not included in the regressions are considered.¹⁴³

3. A Model of Crime Clearance Rates

The first step in developing any time series model is to identify relevant variables for inclusion in the model. In our 1998 article, we set out both our variables and our justifications for using them at some length.¹⁴⁴ We refer those interested in details to our earlier article. In this Article, we will just very briefly summarize our general approach.

For our dependent variable, we are obviously interested in clearance rates for the reasons just discussed. To get a broad picture, we use national clearance rate data from the FBI. We discuss possible problems in the FBI data at greater length below.¹⁴⁵ As a first effort, we use composite, national clearance rate data because they may have the effect of minimizing “noise” that would result from smaller aggregations. The FBI also reports clearance rate data in various subgroupings of cities varying by population size. We discuss those groupings below as well.¹⁴⁶

knowledge about the effects of community interventions and policies in circumstances in which randomized controlled trials are too expensive, premature, or simply impractical.”).

¹⁴² See, e.g., Jessica Dennis et al., *Helmet Legislation and Admissions to Hospital for Cycling Related Head Injuries in Canadian Provinces and Territories: Interrupted Time Series Analysis*, BMJ, May 2013, at 2 (studying helmet laws and hospital admissions); David K. Humphreys, Antonio Gasparrini & Douglas J. Wiebe, *Evaluating the Impact of Florida’s “Stand Your Ground” Self-Defense Law on Homicide and Suicide by Firearm: An Interrupted Time Series Study*, 177 JAMA INTERNAL MED. 44, 45 (2017) (“We used the years that have elapsed since the enactment of the Florida law as a natural experiment to assess its impact on rates of homicide and homicide by firearm.”); Ted Joyce, *A Simple Test of Abortion and Crime*, 91 REV. ECON. & STAT. 112, 112-13 (2009) (assessing effects of the Supreme Court’s *Roe v. Wade* decision on crime rates); H. Laurence Ross, Richard McCleary & Gary LaFree, *Can Mandatory Jail Laws Deter Drunk Driving? The Arizona Case*, 81 J. CRIM. L. & CRIMINOLOGY 156, 161 (1990) (“We analyzed the data by applying an interrupted time series quasi-experimental research design in order to verify whether alcohol-related fatalities had decreased significantly at the time of the law’s inception.”); Bob Edward Vásquez, Sean Maddan & Jeffery T. Walker, *The Influence of Sex Offender Registration and Notification Laws in the United States: A Time-Series Analysis*, 54 CRIME & DELINQ. 175, 182-86 (2008) (assessing effects of Megan’s Law on rape); Franklin E. Zimring, *Firearms and Federal Law: The Gun Control Act of 1968*, 4 J. LEGAL STUD. 133, 171-94 (1975) (using time series analysis to study the impact of the Gun Control Act).

¹⁴³ See, e.g., WILLIAM R. SHADISH, THOMAS D. COOK & DONALD T. CAMPBELL, *EXPERIMENTAL AND QUASI-EXPERIMENTAL DESIGNS FOR GENERALIZED CAUSAL INFERENCE* 103-34 (2002).

¹⁴⁴ See Cassell & Fowles, *supra* note 5, at 1074-82. The issue of whether we have properly “specified” the equation is discussed at greater length in Part III, *infra*.

¹⁴⁵ See *infra* notes 274-310 and accompanying text.

¹⁴⁶ See *infra* notes 310-25 and accompanying text.

Our regression equations also contain various independent or explanatory variables for clearance rates. Identifying those factors, however, remains somewhat of a challenge because the literature on clearance rates is surprisingly thin, particularly regarding assessing clearance rates over time.¹⁴⁷ The available research suggests that much remains to be done to explain clearance rates.¹⁴⁸ The available research does, however, offer a few possible control variables.

The factor most commonly cited as affecting the clearance rate is the crime rate. The standard argument is that as police officers have more crimes to solve, they will be able to solve a smaller percentage of them¹⁴⁹—variously called the “overload” theory,¹⁵⁰ the “overtaxing” theory,¹⁵¹ or the “caseload strain” theory.¹⁵² Although the theory has strong theoretical and intuitive appeal, the empirical support is not completely uniform.¹⁵³ Moreover, crime rates rose

¹⁴⁷ See Edward R. Maguire et al., *Why Homicide Clearance Rates Decrease: Evidence from the Caribbean*, 20 J. POLICING & SOC’Y 373, 379-80 (2010) (noting that a 2010 study was the first English-language survey examining clearance rates in developing nations); Ousey & Lee, *supra* note 85, at 142 (“[T]he homicide clearance literature is incompletely developed . . .”); David Schroeder, *DNA and Homicide Clearance: What’s Really Going On?*, 7 J. INST. JUST. & INT’L STUD. 279, 279 (2007) (noting the “dearth of research” on homicide clearances).

¹⁴⁸ See, e.g., John P. Jarvis & Wendy C. Regoeczi, *Homicides Clearances: An Analysis of Arrest Versus Exceptional Outcomes*, 13 HOMICIDE STUD. 174, 174 (2009) (noting that homicide clearance rates have escaped significant scholarly attention); Kenneth J. Litwin, *A Multilevel Multivariate Analysis of Factors Affecting Homicide Clearances*, 41 J. RES. CRIME & DELINQ. 327, 328-37 (2004) (noting competing theories on crime clearance rates and that “literature on factors affecting homicide clearances is limited and yields somewhat inconsistent results”); Elizabeth Ehrhardt Mustaine et al., *Can Social Disorganization or Case Characteristics Explain Sexual Assault Case Clearances?*, 7 VICTIMS & OFFENDERS 255, 255-56 (2012) (“Understanding factors related to the clearing of criminal cases by law enforcement is an important, but understudied, issue in criminal justice.”).

¹⁴⁹ Cassell & Fowles, *supra* note 5, at 1076-77 (discussing the relationship between crime and clearance rates); see also Maguire et al., *supra* note 147, at 388-90.

¹⁵⁰ Michael Geerken & Walter R. Gove, *Deterrence, Overload, and Incapacitation: An Empirical Evaluation*, 56 SOC. FORCES 424, 429-31 (1977).

¹⁵¹ Daniel Nagin, *General Deterrence: A Review of the Empirical Evidence*, in DETERRENCE AND INCAPACITATION: ESTIMATING THE EFFECTS OF CRIMINAL SANCTIONS ON CRIME RATES 95, 119 (Alfred Blumstein, Jacqueline Cohen & Daniel Nagin eds., 1978).

¹⁵² Kenneth J. Litwin & Yili Xu, *The Dynamic Nature of Homicide Clearances: A Multilevel Model Comparison of Three Time Periods*, 11 HOMICIDE STUD. 94, 101 (2007).

¹⁵³ Compare JAN M. CHAIKEN, U.S. DEP’T OF JUSTICE, R-1777-DOJ, THE CRIMINAL INVESTIGATION PROCESS VOLUME II: SURVEY OF MUNICIPAL AND COUNTY POLICE DEPARTMENTS 41 (1975) (supporting theory), and Hyunseok Jang, Larry T. Hoover & Brian A. Lawton, *Effect of Broken Windows Enforcement on Clearance Rates*, 36 J. CRIM. JUST. 529, 536 (2008) (same), and Maguire et al., *supra* note 147, at 388-90 (same), and Gorazd Meško, Darko Maver & Ines Klinkon, *Urban Crime and Criminal Investigation in Slovenia*, in URBANIZATION, POLICING, AND SECURITY: GLOBAL PERSPECTIVES 301, 317 (Gary Cordner, AnnMarie Cordner & Dilip K. Das eds., 2010) (reporting data supporting theory from

significantly throughout the 1960s and later, and then began declining significantly in the early 1990s, a pattern that does not correspond to the sharp 1966-to-1968 decline in clearance rates. To control for the number of crimes, we collected FBI data on the estimated number of FBI “violent” crimes committed across the country each year from 1950 through 2012.¹⁵⁴ This variable, converted to a crime rate by dividing the number of “violent” crimes by the resident population of the country, is identified as VIOLENT CRIME RATE.¹⁵⁵

Apart from the crime rate, the factors most often cited as influencing clearance rates are law enforcement personnel and expenditures on law enforcement.¹⁵⁶ With more personnel and resources available, the argument goes, more crimes should be cleared, although (once again) despite the intuitive appeal of the hypothesis, the studies are mixed.¹⁵⁷ To control for any influences

Slovenia), and Ko-Hsin Hsu, *Homicide Clearance Determinants: An Analysis of the Police Departments of the 100 Largest U.S. Cities* 58 (2007) (unpublished M.A. thesis, University of Maryland, College Park) (on file with authors) (“In the end, having more sworn officers significantly changed (increased) the homicide clearance rates of low-clearance departments.”), with William M. Doerner & William G. Doerner, *Police Accreditation and Clearance Rates*, 35 *POLICING: INT’L J. POLICE STRATEGIES & MGMT.* 6, 18 (2012) (concluding that rising crime rates put greater pressure on police to solve crimes), and Litwin & Xu, *supra* note 152, at 108 (finding slim support for the theory), and Ousey & Lee, *supra* note 85, at 150 (finding little evidence for overload theory), and Paul-Philippe Paré, Richard B. Felson & Marc Ouimet, *Community Variation in Crime Clearance: A Multilevel Analysis with Comments on Assessing Police Performance*, 23 *J. QUANTITATIVE CRIMINOLOGY* 243, 252 (2007) (describing a Canadian study that found workload only affected clearance of misdemeanors, not clearance of violent or property crimes), and Janice L. Puckett & Richard J. Lundman, *Factors Affecting Homicide Clearances: Multivariate Analysis of a More Complete Conceptual Framework*, 40 *J. RES. CRIME & DELINQ.* 171, 183 (2003) (finding that detective workload had no effect on homicide clearance), and Aki Roberts, *The Influences of Incident and Contextual Characteristics on Crime Clearance of Nonlethal Violence: A Multilevel Event History Analysis*, 36 *J. CRIM. JUST.* 61, 68-69 (2008) (finding no significant effects of police resources on clearance rates). For more information, see Cassell & Fowles, *supra* note 5, at 1077 n.113 (collecting earlier research on this issue).

¹⁵⁴ In the FBI crime reports, “violent” crimes are murder, rape, robbery, and aggravated assault.

¹⁵⁵ In our earlier paper, we used the total crime rate as the measure of workload on the system. See Cassell & Fowles, *supra* note 5, at 1077. In this Article, in an effort to minimize differences between our approach and John Donohue’s approach, we use the violent crime rate. See Donohue, *supra* note 7, at 1153-55, 1164-65 (justifying violent crime rate as the appropriate workload measure).

¹⁵⁶ Cassell & Fowles, *supra* note 5, at 1077-78.

¹⁵⁷ *Id.* at 1077-78 & n.117; see also Charles Wellford & James Cronin, *Clearing Up Homicide Clearance Rates*, 243 *NAT’L INST. JUST. J.* 2, 6 (2000) (finding that assigning multiple detectives to investigate is among those factors linked to high homicide clearance rates); Inimai M. Chettiar, *More Police, Managed More Effectively, Really Can Reduce Crime*, ATLANTIC (Feb. 11, 2015),

these factors may have, we collected data on the number of law enforcement employees per capita (“POLICE PERSONNEL”) and the dollars spent on police protection per capita by state and local governments, adjusted for inflation by the consumer price index (“POLICE DOLLARS (REAL)”).¹⁵⁸

Because our focus is on policing, we did not include any variables for later stages in the criminal justice process, such as sentencing. How changes in imprisonment rates affect crime rates is a subject of debate.¹⁵⁹ Because we are focusing on the “front end” of the criminal justice process—police investigative activities—controlling for events at the back end did not strike us as particularly important.

Criminal justice variables are not the only ones that might affect clearance rates. The criminal justice literature identifies other variables, including demographic variables, as having some bearing on clearance rates or, more generally, on crime rates.¹⁶⁰ While concerns have been raised in criminal justice

<http://www.theatlantic.com/national/archive/2015/02/more-police-managed-more-effectively-really-can-reduce-crime/385390/> [<https://perma.cc/UH3B-ZW2C>].

¹⁵⁸ Schulhofer has previously suggested that clearance rates would respond not simply to changes in law enforcement manpower and expenditures, but also to interactions between these variables and the overall number of crimes—what he calls the “capacity” of the system. Schulhofer, *supra* note 102, at 291. To test his theory, in our previous article, we added to the equations PERSONNEL CAPACITY, which was defined as the rate of police employees per capita divided by the crime rate for index crimes, and DOLLAR CAPACITY (REAL), which was defined as the number of inflation-adjusted dollars spent on police protection per capita divided by the crime rate for index crimes. Cassell & Fowles, *supra* note 5, at 1078. However, these artificial variables had little influence on our earlier equations, so we did not include them again here. *Id.* at 1083 tbl.I.

¹⁵⁹ Compare BARRY LATZER, THE RISE AND FALL OF VIOLENT CRIME IN AMERICA 249 (2016) (citing a “revivified criminal justice system” as an important cause of downward crime trends in the 1990s), and BERT USEEM & ANNE MORRISON PIEHL, PRISON STATE: THE CHALLENGE OF MASS INCARCERATION 51-80 (2008) (offering evidence for the proposition “more prison, less crime”), with OLIVER ROEDER, LAUREN-BROOKE EISEN & JULIA BOWLING, BRENNAN CTR. FOR JUSTICE, WHAT CAUSED THE CRIME DECLINE? 3-4 (2015), <https://www.brennancenter.org/publication/what-caused-crime-decline> [<https://perma.cc/4SRA-NGAA>].

¹⁶⁰ In our earlier article, we explained that we did not include any racial variables in our equations because, among other reasons, long-term racial changes are unlikely to explain short-term clearance rate fluctuations and the empirical support for an association with clearance rates is thin. Cassell & Fowles, *supra* note 5, at 1078 n.121 (citing Peggy S. Sullivan, Determinants of Crime and Clearance Rates for Seven Index Crimes 163-64 (Dec. 1985) (unpublished Ph.D dissertation, Vanderbilt University) (on file with authors)). Since then, a few studies have suggested race might have a connection to clearance rates, although this conclusion is disputed. See, e.g., Lynn A. Addington, *Using National Incident-Based Reporting System Murder Data to Evaluate Clearance Predictors*, 10 HOMICIDE STUD. 140, 148 (2006) (finding murders of white victims more likely to be cleared than murders involving nonwhite victims); Catherine Lee, *The Value of Life in Death: Multiple Regression and Event History Analyses of Homicide Clearance in Los Angeles County*, 33 J. CRIM. JUST. 527, 530

research about “overmodeling” demographic variables,¹⁶¹ we believe some limited variables could be appropriately included. Perhaps the most salient of these factors is the number of persons in the crime-prone juvenile years. Most crimes are committed by persons who are in adolescence or early adulthood.¹⁶² Increases in the number of young persons, particularly in connection with the post-World War II “baby boom,” have been linked with changes in crime rates.¹⁶³ The age band commonly identified with this effect is fifteen to twenty-four,¹⁶⁴ which also corresponds to readily available census data. In addition, there is some mixed evidence of age-related effects on clearance rates.¹⁶⁵ Since

(2005) (finding homicide cases involving nonwhite victims less likely to be cleared); Yili Xu, *Characteristics of Homicide Events and the Decline in Homicide Clearance: A Longitudinal Approach to the Dynamic Relationship, Chicago 1966-1995*, 33 CRIM. JUST. REV. 453, 465-66 (2008) (finding that Latino victims and, in some models, African American victims associated with lower likelihood of clearance); cf. Litwin, *supra* note 148, at 339 (finding homicides with African American victims not less likely to be cleared, but homicides with Latino victims less likely to be cleared). *But see* Ousey & Lee, *supra* note 85, at 149 (finding no effect on homicide clearance rates from racial composition of the population). Because we continue to believe long-term racial demography is likely to have low predictive power in our equations, we did not include any racial variables here.

More broadly, criminologists have been debating whether “discretionary” factors (such as the social position of victims) or “nondiscretionary” factors (such as police workloads) explain crime clearance rates. *See* Brian Lockwood, *What Clears Burglary Offenses? Estimating the Influences of Multiple Perspectives of Burglary Clearance in Philadelphia*, 37 POLICING 746, 748 (2014) (collecting citations to the literature). Because the empirical support for such theories is “decidedly mixed,” and because such general attitudinal variables are unlikely to explain a sudden shift from 1966 to 1968, we did not include any such variables here. *See id.* at 748-49.

¹⁶¹ Compare LOTT, *supra* note 134, at 146-48, 187 (defending use to avoid omitted variable problem), with Aneja, Donohue & Zhang, *supra* note 134, at 593 (criticizing use of thirty-six demographic controls in “right-to-carry” firearms research).

¹⁶² The seminal article on this point remains Travis Hirschi & Michael Gottfredson, *Age and the Explanation of Crime*, 89 AM. J. SOC. 552 (1983).

¹⁶³ *See, e.g.,* LATZER, *supra* note 159, at 243-52; FRANKLIN E. ZIMRING, *THE GREAT AMERICAN CRIME DECLINE* 56-63 (2007). *But cf.* Steven D. Levitt, *Understanding Why Crime Fell in the 1990s: Four Factors That Explain the Decline and Six That Do Not*, 18 J. ECON. PERSP. 163, 171-72 (2004) (arguing that an aging population might account for decline in property crime rates in the 1990s but that it was not an important factor for decline in violent crime rates).

¹⁶⁴ Yale Kamisar, *How to Use, Abuse—And Fight Back with—Crime Statistics*, 25 OKLA. L. REV. 239, 246 (1972) (identifying the fifteen to twenty-four age band as having the most influence on crime rates); *see also* PATSY KLAUS & CALLIE MARIE RENNISON, U.S. DEP’T OF JUSTICE, NCJ 190104, AGE PATTERNS IN VIOLENT VICTIMIZATION, 1976-2000, at 1 (2002) (discussing the rate of nonfatal violent victimization by age groups).

¹⁶⁵ *See* Lee, *supra* note 160, at 530 (finding homicide cases involving old victims less likely to be solved); Litwin, *supra* note 148, at 341 (finding cases with child victims more likely to be cleared than cases with older victims); Litwin & Xu, *supra* note 152, at 104 (“The victim’s age has a significant negative relationship with homicide clearances . . .”).

it is conceivable that changes in the proportion of the population in the juvenile age band might be associated with changes in clearance rates, we included a variable to take into account this factor ("JUVENILES").

Changes in various socioeconomic variables are also plausible candidates for affecting clearance rates. For example, criminal justice literature identifies variances in the unemployment rate as a possible explanation for crime rate fluctuations.¹⁶⁶ Similarly, changes in income levels and labor force participation might be associated with crime rates¹⁶⁷ and clearance rates,¹⁶⁸ particularly since such factors might be viewed as a measure of the opportunity cost of committing a crime. While the evidence regarding effects on clearance rates of such variables is mixed,¹⁶⁹ we included variables for the labor force participation ("LABOR FORCE PARTICIPATION"), unemployment rate ("UNEMPLOYMENT"), and disposable per capita real income ("PER CAPITA INCOME (REAL)").¹⁷⁰

As a measure of changing social circumstances that might be related to crime, we also added a variable that measured live births to unmarried mothers¹⁷¹ and converted it to a per capita rate by dividing by resident population ("BIRTHS TO UNMARRIED WOMEN").

¹⁶⁶ See, e.g., ROEDER, EISEN & BOWLING, *supra* note 159, at 48-53 ("Consistent with the larger body of research, this report finds that the decrease in unemployment in the 1990s was responsible for about 0 to 5 percent of that decade's crime drop."). For additional literature on this issue, see Cassell & Fowles, *supra* note 5, at 1079 n.127.

¹⁶⁷ See ROEDER, EISEN & BOWLING, *supra* note 159, at 49-51 ("In line with the past body of research, this report finds that increases in per capita income were responsible for 5 to 10 percent of the decreases in crime in both the 1990s and the 2000s."); Richard Fowles & Mary Merva, *Wage Inequality and Criminal Activity: An Extreme Bounds Analysis for the United States, 1975-1990*, 34 CRIMINOLOGY 163, 179-80 (1996) (finding robust linkages between wage inequality and murder and assault rates).

¹⁶⁸ See Ousey & Lee, *supra* note 85, at 151 (finding contrary-to-expectation positive association between economic deprivation and homicide clearance rates); Xu, *supra* note 160, at 468 (finding a significant negative effect of median household income on clearance rates in one model).

¹⁶⁹ See Mustaine et al., *supra* note 148, at 258-62, 272-73; Roberts, *supra* note 153, at 67 (finding unemployment rate had a statistically significant negative effect on robbery and aggravated assault clearance rates, but not rape clearance rates).

¹⁷⁰ It has very recently been suggested that there is a clear link between interest rates and crimes. See James Austin & Gregory D. Squires, *The 'Startling' Link Between Low Interest Rates and Low Crime*, CRIME REPORT (Dec. 6, 2016), <http://thecrimereport.org/2016/12/06/the-startling-link-between-low-interest-rates-and-low-crime/> [<https://perma.cc/H6XB-9UMF>] ("When interest rates go up, crime goes up. When interest rates go down, crime goes down."). Because this possible linkage came to our attention so late in the process of our research, we were not able to explore it further.

¹⁷¹ Cf. Ousey & Lee, *supra* note 85, at 151 (finding no statistically significant relationship between homicide clearances and measure of family breakdown); Sullivan, *supra* note 160, at 165 (finding a relationship between murder clearances and the percentage of families with single mothers).

It has also been suggested that increasing urbanization during the 1960s was an explanation for rising crime rates.¹⁷² Conceivably, urbanization could have some bearing on clearance rates as well.¹⁷³ For instance, clearance rates for index crimes are generally higher in smaller cities.¹⁷⁴ A few studies of clearance rates, however, have found slim predictive power in urbanization.¹⁷⁵ To control for the possible effects of urbanization, we added a variable for the percent of the resident population residing in urban areas ("URBANIZATION").

Schulhofer has also suggested that a control variable should be included for the distribution of crimes committed in large and small cities.¹⁷⁶ Because smaller cities have higher clearance rates, Schulhofer reasons that a shift in the distribution of crimes could bias our results.¹⁷⁷ To test this hypothesis, we controlled for the percentage of violent crimes committed in small cities, as reported in the UCR ("CRIME IN SMALL CITIES").

As a final control, we added a standard time trend variable, identified as "TREND OVER TIME." Although some cautions have been raised about such a variable,¹⁷⁸ we thought it might be useful to control for long-term, time-related trends apart from *Miranda*.

We believe we included the most important variables that might have influenced crime clearance rates over the years 1950 to 2012, along with the *Miranda* variable.¹⁷⁹ To capture the effects of the *Miranda* decision, we included

¹⁷² See Kamisar, *supra* note 164, at 247. See generally LATZER, *supra* note 159, at 50-56 (discussing African American urbanization and crime rates); URBANIZATION, POLICING, AND SECURITY: GLOBAL PERSPECTIVES, *supra* note 153, at 4; Ajaz Ahmad Malik, *Urbanization and Crime: A Relational Analysis*, 21 J. HUMAN. & SOC. SCI. 68, 69-70 (2016) (reviewing literature on the connection between crime and city size).

¹⁷³ See Schulhofer, *supra* note 125, at 366-68 (noting that "[c]learance rates are consistently lower in the larger cities" and suggesting that as a greater percentage of the population exists in large cities, and therefore a greater percentage of crimes are committed in large cities, the national clearance rate will be affected).

¹⁷⁴ See UCR-2010, *supra* note 79, at 317 tbl.25 (reporting that violent crime clearance rates were 39.9% for cities with populations larger than 250,000, 47.6% for cities with populations of 50,000 to 99,999, and 56.5% for cities with populations smaller than 10,000).

¹⁷⁵ See Cassell & Fowles, *supra* note 5, at 1080 n.133 (collecting studies).

¹⁷⁶ See Schulhofer, *supra* note 125, at 366-67 (suggesting this control for violent crimes).

¹⁷⁷ *Id.* at 367.

¹⁷⁸ See, e.g., Charles R. Nelson & Heejoon Kang, *Pitfalls in the Use of Time as an Explanatory Variable in Regression*, 2 J. BUS. & ECON. STAT. 73, 80 (1984).

¹⁷⁹ We were intrigued by the possibility that increased cell phone usage might have had some effect on clearance rates. See generally Jonathan Klick, John MacDonald & Thomas Stratmann, *Mobile Phones and Crime Deterrence: An Underappreciated Link*, in RESEARCH HANDBOOK ON THE ECONOMICS OF CRIMINAL LAW 243 (Alon Harel & Keith N. Hylton eds., 2012). However, we could find no developed body of literature on clearance rates and cell phones. Even if we could, cell phones appeared on the scene well after *Miranda*. Accordingly, we did not include a variable for cell phone usage.

It has also been suggested that increases in abortion after *Roe v. Wade*, 410 U.S. 113 (1973),

led to changes in crime rates by reducing the number of “unwanted” kids, thus later reducing the number of unsupervised and crime-prone juveniles. See John J. Donohue III & Steven D. Levitt, *The Impact of Legalized Abortion on Crime*, 116 Q.J. ECONOMICS 379, 380 (2001). See generally STEVEN D. LEVITT & STEPHEN J. DUBNER, *FREAKONOMICS: A ROGUE ECONOMIST EXPLORES THE HIDDEN SIDE OF EVERYTHING* 137-43 (2005). This theory, however, as originally propounded by Donohue and Levitt included a (later-acknowledged) mistake, John J. Donohue III & Steven D. Levitt, *Measurement Error, Legalized Abortion, and the Decline in Crime: A Response to Foote and Goetz*, 123 Q.J. ECON. 425, 425 (2008), and has been heavily attacked for various reasons, see LATZER, *supra* note 159, at 254 (noting the abortion hypothesis “is unable to explain why, in the late 1980s and early 1990s, crime rose substantially among youth born during the legalization decade”); Philip J. Cook & John H. Laub, *After the Epidemic: Recent Trends in Youth Violence in the United States*, 29 CRIME & JUST. 1, 23 (2002) (noting that the timing of the theory is wrong because crime rates among juveniles did not decrease until about 1994); Christopher L. Foote & Christopher F. Goetz, *The Impact of Legalized Abortion on Crime*, 123 Q.J. ECON. 407, 409 (2008) (concluding that if the measurement mistake is corrected, the relationship between abortion and crime is much weaker); Ted Joyce, *Did Legalized Abortion Lower Crime?*, 39 J. HUM. RESOURCES 1, 2 (2004) (“Thus, even in models with state and year fixed effects, the relationship between abortion and crime may be biased by differences in within-state growth in cocaine markets over time, a classic problem of omitted variables.”); Joyce, *supra* note 142, at 112 (noting that because of the broad implications of the conclusion that legalized abortion lowered crime rates, more research must be done); John R. Lott Jr. & John Whitley, *Abortion and Crime: Unwanted Children and Out-of-Wedlock Births*, 45 ECON. INQUIRY 304, 305-06 (2007) (noting that although the abortion hypothesis is plausible, the fact that the legalization of abortion increased the number of out-of-wedlock births forecloses that hypothesis). Because the theory is so debated, and because we already control for changes in the crime rate that presumably capture any abortion effects, we did not try to separately model changes in abortion law here. *But cf.* Donohue, *supra* note 7, at 1161 (jettisoning noneconomic variables in clearance rate regressions to simplify equations).

Likewise, it has been argued that reductions in lead absorption due to the introduction of unleaded gasoline reduced crime rates. See LATZER, *supra* note 159, at 255 (“[T]he government’s blood tests showed that between 1988 and 1991, lead levels fell dramatically for the age 6-19 cohort as well as for African Americans, two groups highly involved in the violent crime of those years. As crime was soaring, not declining, in 1988 through 1991, the effects were the very opposite of what [the theory suggested].”); Rick Nevin, *How Lead Exposure Relates to Temporal Changes in IQ, Violent Crime, and Unwed Pregnancy*, 83 ENVTL. RES. 1, 2 (2000); Rick Nevin, *Understanding International Crime Trends: The Legacy of Preschool Lead Exposure*, 104 ENVTL. RES. 315, 315 (2007); Jessica Wolpaw Reyes, *Environmental Policy as Social Policy? The Impact of Childhood Lead Exposure on Crime*, 7 B.E. J. ECON. ANALYSIS & POL’Y 1, 1 (2007). This theory, too, is heavily debated. See, e.g., Scott Firestone, *Does Lead Exposure Cause Violent Crime? The Science Is Still out*, DISCOVER: THE CRUX (Jan. 8, 2013), <http://blogs.discovermagazine.com/crux/2013/01/08/does-lead-exposure-cause-violent-crime-the-science-is-still-out/#.WEwtgVwqx8> [<https://perma.cc/Y76E-478W>]. Here again, because of the ongoing debate and because we had already modeled crime rates in our equations, we did not attempt to model lead exposure effects.

a “dummy” variable in the equations (“*MIRANDA*”), which was assigned the value of 0 before *Miranda* and 1 after.¹⁸⁰ Because we were working with yearly data and because *Miranda* was handed down on June 13, 1966 (roughly halfway through 1966), deciding what to do with the 1966 value of the *MIRANDA* variable was an issue. As a first approximation of *Miranda*’s effects, in our earlier paper, we first assigned *MIRANDA* the value of 0 for years before 1965, 0.5 for 1966, and 1 for 1967 and the following years. Later analysis in that paper, as well as in a follow-on analysis from John Donohue, suggested that a three-year “phase in” for *MIRANDA* might be appropriate—i.e., that it was appropriate to assign *MIRANDA* a value of 0 before 1966, 0.333 in 1966, 0.666 in 1967 (the first full year in which the *Miranda* decision was in effect), and 1 in 1967 and later years.¹⁸¹ The reason for the delayed phase in for *MIRANDA* was that *Miranda*’s effect did not take hold throughout the country instantaneously. Instead, it is commonly accepted that it took police a year or so to train officers in the new *Miranda* procedures.¹⁸² We discussed this issue at length in our earlier paper and simply follow the three-year phase in here.¹⁸³

We think these variables contain the most important influences on crime clearance rates over the last five decades. Although the equations could include other variables, a parsimonious construction has certain statistical advantages.¹⁸⁴ We discuss below whether “omitted” variables could have influenced our conclusions.¹⁸⁵

¹⁸⁰ Of course, whether the *MIRANDA* variable captures changes in clearance rates due to the *Miranda* decision or some other factor at the time is open for discussion. We provide our reasons for attributing the changes to *Miranda* at *infra* Part VI.

¹⁸¹ See Cassell & Fowles, *supra* note 5, at 1095.

¹⁸² WAYNE R. LAFAVE ET AL., CRIMINAL PROCEDURE 369 (5th ed. 2009) (“[I]n the months immediately following that decision it was determined that the police did not regularly or completely give the warnings before interrogation. This was largely attributable to delays in police training about the new requirements, and later studies found that police were regularly advising suspects of their rights before attempting to question them.”).

¹⁸³ See Cassell & Fowles, *supra* note 5, at 1092-95 (justifying the three-year phase in); Donohue, *supra* note 7, at 1166-67 (finding that the three-year phase in provided the best results).

¹⁸⁴ WILFREDO PALMA, TIME SERIES ANALYSIS 152-53 (2016) (discussing advantages of parsimony in model design); cf. JUDEA PEARL, CAUSALITY: MODELS, REASONING, AND INFERENCE 45-48 (2d ed. 2009) (discussing Occam’s razor in designing models).

¹⁸⁵ See *infra* Part VI.

Using standard ordinary least squares (“OLS”) regression techniques, it is possible to develop an equation to explain national crime clearance rates as follows:

$$\begin{aligned}
 \text{CLEARANCE RATE}_i &= \beta_{0i} + \beta_1(\text{MIRANDA})_i \\
 \text{(for violent, property,} &+ \beta_2(\text{VIOLENT CRIME RATE})_i \\
 \text{and individual crimes)} &+ \beta_3(\text{POLICE PERSONNEL})_i \\
 &+ \beta_4(\text{POLICE DOLLARS (REAL)})_i \\
 &+ \beta_5(\text{PERSONNEL CAPACITY})_i \\
 &+ \beta_6(\text{DOLLAR CAPACITY} \\
 &\quad \text{(REAL)})_i \\
 &+ \beta_7(\text{JUVENILES})_i \\
 &+ \beta_8(\text{LABOR FORCE} \\
 &\quad \text{PARTICIPATION})_i \\
 &+ \beta_9(\text{UNEMPLOYMENT})_i \\
 &+ \beta_{10}(\text{PER CAPITA INCOME} \\
 &\quad \text{(REAL)})_i \\
 &+ \beta_{11}(\text{BIRTHS TO UNMARRIED} \\
 &\quad \text{WOMEN})_i \\
 &+ \beta_{12}(\text{URBANIZATION})_i \\
 &+ \beta_{13}(\text{CRIME IN SMALL CITIES})_i \\
 &+ \beta_{14}(\text{TREND OVER TIME})_i \\
 &+ \varepsilon_i
 \end{aligned}$$

where i runs from 1950 to 2012 and the independent variables are as described above. This is a “reduced form” equation, which assumes that there are no “simultaneity” problems (that is, that the dependent clearance rate variables do not affect any of the independent variables), an assumption we discuss below.¹⁸⁶

4. Regression Equation Results

In this Section, we report results stemming from this model. In Table 2, we report results for equations run on data from 1950 to 2012¹⁸⁷ for the dependent variables for the FBI’s two composite clearance rate categories: violent crimes and property crimes. As can be seen, controlling for the potentially confounding influences, we find that our *MIRANDA* variable has statistically significant¹⁸⁸ negative effects on crime clearance rates for both categories.

¹⁸⁶ Cassell & Fowles, *supra* note 5, at 1082; *see infra* notes 268-73 and accompanying text.

¹⁸⁷ Because our data stop at 2012, they do not include effects from possibly worsening police-citizen relations in the wake of the Ferguson shooting, such as the developing Black Lives Matter movement and related issues. *See generally* HEATHER MAC DONALD, THE WAR ON COPS: HOW THE NEW ATTACK ON LAW AND ORDER MAKES EVERYONE LESS SAFE (2016).

¹⁸⁸ All statistical significance tests reported in this Article are two-tailed, although an argument could be made for a one-tailed test. We are aware of the controversy surrounding

Table 2. Violent and Property Crime Clearance Rate Regressions
 (1950 to 2012) (three-year *Miranda* phase in)
 OLS Regressions on Clearance Rates for Cities (*t* statistics in parenthesis)

Variable	Violent Crimes	Property Crimes
<i>MIRANDA</i>	-9.446 (-4.991)***	-2.221 (-2.614)*
<i>VIOLENT CRIME RATE</i>	-0.109 (-2.017)*	-0.011 (-0.432)
<i>POLICE PERSONNEL</i>	6.329 (-1.827)†	1.451 (0.933)
<i>POLICE DOLLARS (REAL)</i>	-0.098 (-1.126)	0.003 (0.079)
<i>JUVENILES</i>	-1.384 (-4.264)***	-0.495 (-3.395)**
<i>LABOR FORCE PARTICIPATION</i>	0.298 (1.081)	-0.275 (-2.221)*
<i>UNEMPLOYMENT</i>	0.703 (2.842)**	0.330 (2.973)**
<i>PER CAPITA INCOME (REAL)</i>	0.00274 (2.272)*	0.001 (0.975)
<i>BIRTHS TO UNMARRIED WOMEN</i>	-0.347 (-0.864)	-0.054 (-0.827)
<i>URBANIZATION</i>	-0.347 (-0.864)	-0.366 (-2.025)*
<i>CRIME IN SMALL CITIES</i>	0.0177 (0.179)	-0.050 (-1.125)
<i>TREND OVER TIME</i>	-0.256 (-1.037)	-0.033 (-0.301)
<i>INTERCEPT</i>	564.8 (1.231)	131.9 (0.640)
<i>ADJUSTED R²</i>	0.9752	0.9511

*** significant at .001 level ** significant at .01 level * significant at .05 level
 † significant at .10 level

reporting *p*-values and have tried to follow the recommendations of the American Statistical Association in our approach and report of findings. See generally Ronald L. Wasserstein & Nicole A. Lazar, Editorial, *The ASA's Statement on p-Values: Context, Process, and Purpose*, 70 AM. STATISTICIAN 129 (2016). All *p*-values reported in this Section should be considered in light of the Bayesian model averaging we report in the next Section.

In this table and others, we use gray shading to denote statistically significant effects of the *MIRANDA* variable, with darker gray indicating significance at the conventional 95% or higher confidence level and light gray indicating significance at the 90% confidence level.

The magnitude of the *MIRANDA* effect is -9.446 for violent crimes (meaning *MIRANDA* depressed violent crime clearance rates by 9.446 percentage points) and -2.221 for property crimes (meaning *MIRANDA* depressed violent crime clearance rates by 9.446 percentage points). While our focus in this Article is on the *MIRANDA* variable, we found a few other interesting results. For example, as expected, an increase in the violent crime rate produced a statistically significant reduction in clearance rates (although the same thing did not occur for property crimes). Similarly, as expected, we found that an increase in police personnel led to an increase in violent crime clearance rates, although this result was statistically significant only at the 90% confidence level (and did not occur for property crimes). The proportion of the population consisting of juveniles in the crime-prone years (fifteen- to twenty-four-year-olds) also had a statistically significant negative effect for both crime categories. This finding can be viewed as consistent with suggestions in the clearance rate literature that gang-related crimes are more difficult to clear than other crimes¹⁸⁹ because an increase in juveniles might produce (for example) an increase in gang membership.

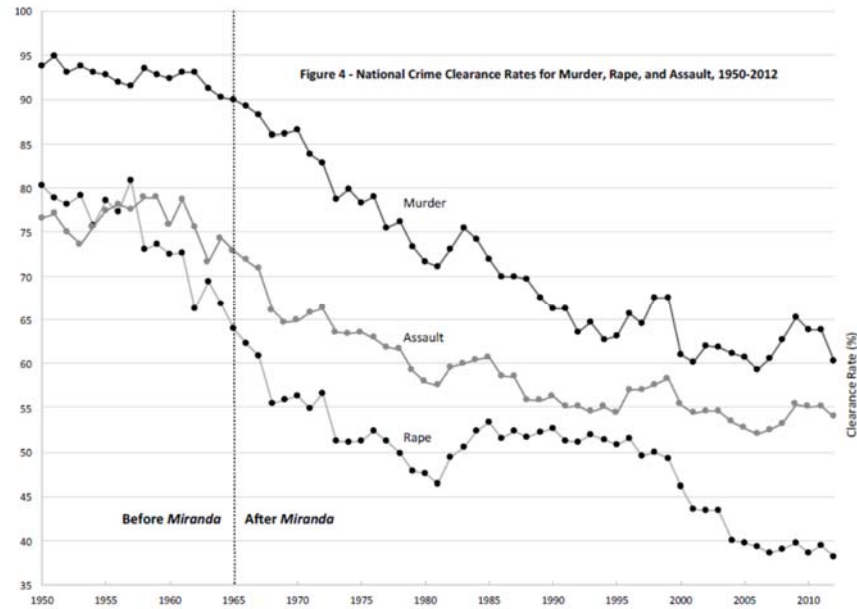
Table 2 reports statistics for aggregated categories composed of individual crimes. However, such aggregations may obscure trends among these individual crimes.¹⁹⁰ Accordingly, we ran our regression equations for each of the seven individual component crimes for which data from 1950 to 2012 are available.¹⁹¹

¹⁸⁹ See, e.g., Litwin, *supra* note 148, at 339, 340 tbl.1 (showing a statistically significant decrease in homicide clearing rates when the homicide was gang-related).

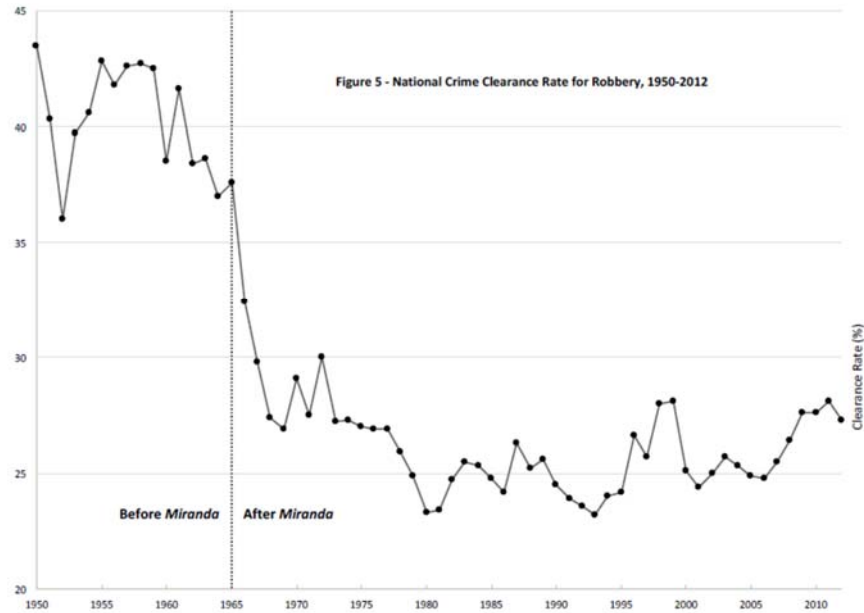
¹⁹⁰ Cassell & Fowles, *supra* note 5, at 1083.

¹⁹¹ Clearance rate data for arson is currently reported in the UCR, but because that data does not extend back to 1966, we do not report any arson results here.

Figure 4 depicts clearance rates for all violent crimes except robbery—i.e., for murder, rape, and assault—from 1950 to 2012.



As can be seen, all three crimes exhibit downward trends in their clearance rates during the 1960s, although they do not appear to exhibit the pronounced break at 1966 seen in the violent crime and property crime categories. Robbery is charted separately because its clearance rate is much lower than the others. As can be seen in Figure 5, robbery clearance rates exhibit a pronounced downward trend from 1966 to 1968, suggesting a harmful impact from *Miranda*.



Regression results track what these visual observations suggest. As shown in Table 3, we find a statistically significant *MIRANDA* effect for robbery but not for other individual violent crimes.

Table 3. Total and Individual Violent Crimes Regressions(1950 to 2012) (three-year *Miranda* phase in)OLS Regressions on Clearance Rates for Cities (*t* statistics in parenthesis)

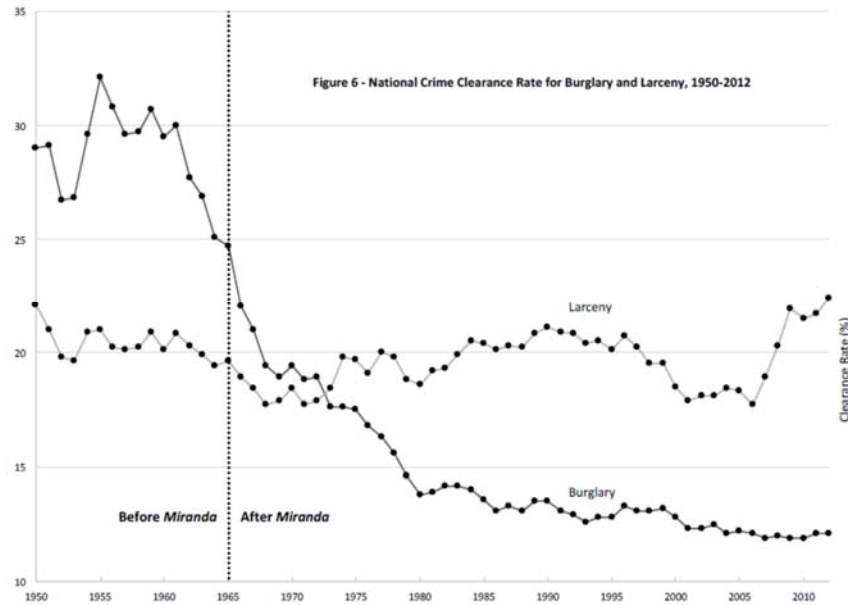
Variable	Violent Crimes	Murder	Rape	Robbery	Aggravated Assault
<i>MIRANDA</i>	-9.446 (-4.991)***	-1.005 (-0.453)	-3.501 (-1.497)	-5.683 (-3.069)**	-2.762 (-1.459)
<i>VIOLENT CRIME RATE</i>	-0.109 (-2.017)*	-0.264 (-4.161)***	0.011 (0.162)	-0.133 (-2.510)*	-0.126 (-2.336)*
<i>POLICE PERSONNEL</i>	6.329 (1.827)†	3.158 (0.778)	4.298 (1.004)	5.634 (1.662)	5.838 (1.685)†
<i>POLICE DOLLARS (REAL)</i>	-0.098 (-1.126)	0.008 (0.076)	-0.018 (0.167)	0.035 (0.405)	-0.062 (-0.713)
<i>JUVENILES</i>	-1.384 (-4.264)***	0.868 (2.281)*	-2.153 (-5.364)***	-1.002 (-3.153)**	-0.855 (-2.631)*
<i>LABOR FORCE PARTICIPATION</i>	0.298 (1.081)	-0.455 (-1.405)	0.205 (0.600)	-0.087 (-0.322)	0.039 (0.141)
<i>UNEMPLOYMENT</i>	0.703 (2.842)**	0.143 (0.493)	0.174 (0.568)	0.758 (3.131)**	0.734 (2.965)**
<i>PER CAPITA INCOME (REAL)</i>	0.00274 (2.272)*	-0.003 (1.918)†	0.001 (0.476)	0.001 (1.226)	0.001 (0.795)
<i>BIRTHS TO UNMARRIED WOMEN</i>	-0.347 (-0.864)*	0.204 (1.197)	-0.238 (-1.322)	0.016 (0.114)	-0.130 (-0.895)
<i>URBANIZATION</i>	-0.347 (-0.864)	-0.752 (-1.595)	-1.298 (-2.612)*	0.128 (0.326)	0.417 (1.036)
<i>CRIME IN SMALL CITIES</i>	0.0177 (0.179)	-0.428 (-3.689)***	-0.072 (0.591)	0.027 (0.282)	-0.056 (-0.568)
<i>TREND OVER TIME</i>	-0.256 (-1.037)	0.202 (0.697)	-0.301 (-0.985)	-0.629 (-2.600)*	-0.505 (-2.043)*
<i>INTERCEPT</i>	564.8 (1.231)	-208.6 (-0.388)	762.6 (1.345)	1258.0 (2.803)**	1033.0 (2.252)*
<i>ADJUSTED R²</i>	0.9752	0.9856	0.9846	0.9648	0.9797

*** significant at .001 level ** significant at .01 level * significant at .05 level

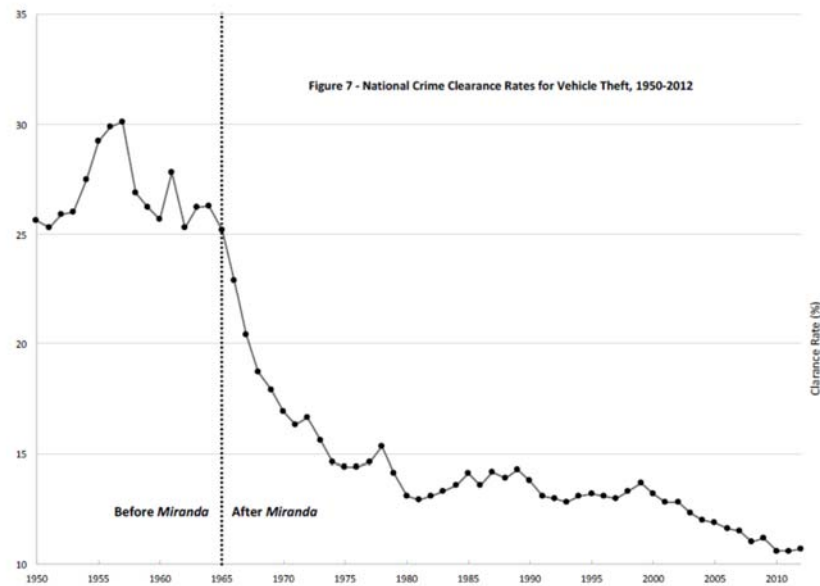
† significant at .10 level

The size of the statistically significant negative effect on robbery clearance rates from *MIRANDA* is (-5.683). For the other three crimes, the signs associated with *MIRANDA* were all negative, but none of the results were statistically significant at conventional levels.

We turn next to the three property crimes (burglary, larceny, and vehicle theft). In Figure 6, we graph clearance rates over time from 1950 to 2012 for burglary and larceny.



As can be seen, there are downward trend lines during the 1960s, which appear to be somewhat pronounced around the time of *Miranda*, particularly for larceny. Larceny also trends upward beginning around 2008, something we discuss below.¹⁹² Similar results are depicted in Figure 7, which shows clearance rates for vehicle thefts.



Here again, we see a downward trend in the 1960s, with a particularly pronounced drop in the three years (1966 to 1968) following the announcement of *Miranda*.

¹⁹² See *infra* notes 243-48 and accompanying text.

Table 4 reports our clearance rate findings for the three individual property crimes.

Table 4. Total and Individual Property Crimes Regressions

(1950 to 2012) (three-year *Miranda* phase in)

OLS Regressions on Clearance Rates for Cities (*t* statistics in parenthesis)

Variable	Property Crimes	Burglary	Larceny	Vehicle Theft
<i>MIRANDA</i>	-2.221 (-2.614)*	-1.494 (-1.415)	-2.071 (-2.052)*	-5.516 (-5.151)***
<i>VIOLENT CRIME RATE</i>	-0.011 (0.432)	-0.063 (-2.092)*	0.012 (0.405)	0.000 (0.001)
<i>POLICE PERSONNEL</i>	1.451 (0.933)	2.801 (1.449)	0.788 (0.427)	-1.648 (-0.841)
<i>POLICE DOLLARS (REAL)</i>	0.003 (0.079)	0.016 (0.323)	-0.025 (-0.546)	-0.015 (-0.298)
<i>JUVENILES</i>	-0.495 (-3.395)**	-1.161 (-6.404)***	-0.128 (-0.739)	-0.799 (-4.347)***
<i>LABOR FORCE PARTICIPATION</i>	-0.275 (-2.221)*	-0.141 (-0.915)*	-0.279 (-1.894)	0.446 (2.854)**
<i>UNEMPLOYMENT</i>	0.330 (2.973)**	0.588 (4.260)***	0.314 (2.376)*	0.178 (1.268)
<i>PER CAPITA INCOME (REAL)</i>	0.001 (0.975)	0.001 (1.385)	0.000 (0.774)	0.001 (2.040)*
<i>BIRTHS TO UNMARRIED WOMEN</i>	-0.054 (-0.827)	0.081 (0.997)	-0.088 (-1.140)	-0.097 (-1.181)
<i>URBANIZATION</i>	-0.366 (-2.025)*	0.982 (4.376)***	-0.961 (-4.482)***	0.681 (2.993)**
<i>CRIME IN SMALL CITIES</i>	-0.050 (-1.125)	0.074 (1.343)	-0.072 (-1.359)	-0.062 (-1.104)
<i>TREND OVER TIME</i>	-0.033 (-0.301)	-0.875 (-6.339)***	0.320 (2.430)*	-0.505 (-3.608)***
<i>INTERCEPT</i>	131.9 (0.640)	1681.0 (6.565)***	-524.5 (-2.143)*	949.3 (3.656)***
<i>ADJUSTED R²</i>	0.9511	0.9892	0.6763	0.9865

*** significant at .001 level ** significant at .01 level * significant at .05 level

† significant at .10 level

Tracking visual observation of the trend lines, we found statistically significant negative effects for *MIRANDA* for larceny and vehicle theft

clearances. For burglary clearances, the sign associated with *MIRANDA* was negative as expected but not quite statistically significant at conventional levels.

In sum, our regression equations find that, even after controlling for important and potentially confounding variables, our *MIRANDA* variable was associated with statistically significant drops in crime clearance rates for both aggregate categories (violent and property crimes) and for the individual crimes of robbery, larceny, and vehicle theft. Interestingly, we have a consistent negative sign across all crime categories. These findings support the position that *Miranda* did indeed interfere with law enforcement's ability to clear crimes.

C. Quantification of Miranda's Cost

Our regression equations also allow us to quantify the number of lost clearances that appear to be attributable to *MIRANDA*. Table 5 shows these results.

Table 5. Size of the Effect of the *MIRANDA* Variable

Crime	2012 Clearance Rate	<i>MIRANDA</i> Effect	Percentage Increase Without <i>Miranda</i>	2012 Additional Cleared Crimes Without <i>Miranda</i>
Violent	46.8	-9.446	20.1%	213,000
Murder	62.5	0.000	N/A	N/A
Rape	40.1	0.000	N/A	N/A
Robbery	28.1	-5.683	20.2%	61,500
Aggravated Assault	55.8	0.000	N/A	N/A
Property	19.0	-2.221	11.6%	929,000
Burglary	12.7	0.000	N/A	N/A
Larceny	22.0	-2.071	9.4%	513,000
Vehicle Theft	11.9	-5.516	46.3%	304,000

The numbers cited in Table 5 for additional cleared crimes were derived by multiplying the percentage increase in clearance rate that occurs without *MIRANDA* against total offenses known for all agencies.¹⁹³

D. Explaining the Pattern

Our equations suggest a "*MIRANDA* effect" on clearance rates for violent and property crimes, as well as for robbery, larceny, and vehicle theft, but not for

¹⁹³ The clearance rate data we used is for cities only. We have made the assumption that the *MIRANDA* effect found in cities also applies to other agencies. The net effect of this assumption is to increase the "additional cleared crimes" category by about 25%. See UCR-2012, *supra* note 79, at 394 tbl.25 (showing that all agencies cleared 1,060,028 violent crime offenses, while city agencies cleared 834,273 violent crime offenses).

homicide, rape, assault, or burglary.¹⁹⁴ What could explain this pattern?¹⁹⁵ We discuss some tentative possibilities in this Section.

Turning first to the aggregate categories of violent and property crimes, one reason why we may have found our *MIRANDA* effect there is precisely because these are aggregate categories. Individual crime clearance categories may be subject to long-term changes for various reasons that are hard to investigate.¹⁹⁶ The larger aggregate categories might tend to eliminate some of the “noise”¹⁹⁷ in smaller categories, thereby proving more informative on broader trends.¹⁹⁸ It is important to understand, however, that these aggregate categories will be largely driven by one or two component crimes. Violent crimes, for example, consist of about 60% aggravated assaults and 30% robberies.¹⁹⁹ Property crimes are about two-thirds larcenies.²⁰⁰ Thus, the noise-reducing capacities of the aggregate categories are restricted.

Turning to individual crimes, one thing of interest is that clearances for what might be loosely denominated as crimes of passion or aggression (i.e., murder, rape, and assault) were apparently unaffected by *Miranda*, while clearances for what are more often crimes of deliberation (i.e., robbery, larceny, and vehicle theft) were affected. These categories, of course, are gross oversimplifications, as there are obviously coolly calculated murders and impulsive car thefts. But if these generalizations are correct more often than not, they might correspond with the empirical evidence suggesting that *Miranda* more substantially interferes with police efforts to interrogate repeat offenders and professional criminals.²⁰¹

One potential problem with this theory is the crime of burglary. In our 1998 article, we ventured essentially this same theory—which worked more cleanly then because burglary was one of the crimes for which we found a *MIRANDA* effect.²⁰² Burglary does seem to be a crime often committed by professional

¹⁹⁴ We give our reasons for attributing these results to *Miranda*’s restrictions on police interrogation rather than some other cause. *See infra* Part VI.

¹⁹⁵ Because our focus is on *Miranda*’s effects, we will not discuss other effects we found (or failed to find) in specific equations—e.g., the effects of police and economic variables on clearance rates.

¹⁹⁶ *See, e.g., infra* note 216 and accompanying text (discussing changes in murder clearance rates due to changing patterns of murder).

¹⁹⁷ *See infra* notes 296-99, 328-63 and accompanying text (discussing noise in California data).

¹⁹⁸ Feeney has suggested that the aggregate categories are “not very informative” compared to the individual categories, but he does not address the “noise” issue we are concerned about. Feeney, *supra* note 8, at 108.

¹⁹⁹ *See, e.g.,* UCR-2010, *supra* note 79, at 317 tbl.25.

²⁰⁰ *See, e.g., id.*

²⁰¹ Cassell, *supra* note 16, at 464-66 (citing studies that show that repeat offenders may be less likely to confess than those without criminal records).

²⁰² *See* Cassell & Fowles, *supra* note 5, at 1089 (“Our equations suggest a ‘*Miranda* effect’ on clearance rates for . . . burglary But if the generalizations are more often than not correct, they might correspond with the empirical evidence suggesting that *Miranda* more

criminals,²⁰³ and the fact that burglary does not appear in our basic equation would be a strike against the theory. But we were able to produce a *MIRANDA* effect here in some of our other regression equations, as discussed below.²⁰⁴ And perhaps there are facts about burglaries that make them less likely to have been affected by *Miranda*.²⁰⁵

Another possible partial explanation for our patterns is that police may be able to shift resources to maintain high clearance rates for the most serious and least common crimes (e.g., murder and rape) at the expense of lower clearance rates for some less serious and more common crimes (e.g., larceny and vehicle theft). Police agencies are frequently judged by their effectiveness in solving the most notorious crimes, especially murders.²⁰⁶ As a result, maximum “detective power” is allocated to solve homicides.²⁰⁷ If *Miranda* affected clearances generally, one would expect police to respond. To the extent resources affect clearance rates,²⁰⁸ police should be able to maintain high clearance rates for the most serious crimes by allocating more resources to solve them, but at the cost of lower clearance rates in crime categories less visible to the public.²⁰⁹

Support for this theory comes from the only available before-and-after *Miranda* study analyzing individual crimes. Researchers in Pittsburgh found that, after *Miranda*, the confession rate in homicide cases fell 27.3 percentage points, robbery cases 25.7 points, auto larceny cases 21.2 points, burglary and receiving goods cases 13.7 points, and forcible sex offense cases 0.5 points.²¹⁰ But while this study found no post-*Miranda* change in homicide clearances rates, it found a significant robbery clearance rate drop.²¹¹ Interestingly, in the eighteen months before *Miranda*, Pittsburgh police cleared 94.3% (fifty of fifty-three) of

substantially affects police success in dealing with repeat offenders and professional criminals.” (footnote omitted)).

²⁰³ See LARRY J. SIEGEL, CRIMINOLOGY 343 (5th ed. 1995); Claire Nee, *Understanding Expertise in Burglars: From Pre-Conscious Scanning to Action and Beyond*, 20 AGGRESSION & VIOLENT BEHAV. 53, 53-55 (2015).

²⁰⁴ See *infra* Tables 6 & 8 (noting a *MIRANDA* effect for burglary for Cassell/Fowles specification with 1950 to 2007 data, which BMA indicates is robust). But see *supra* Table 4 (noting a *MIRANDA* effect for burglary for Donohue specification with 1950 to 2012 data); *infra* Table 7 (showing that BMA indicates such an effect is not robust).

²⁰⁵ See *infra* notes 445-50 and accompanying text.

²⁰⁶ See Samuel R. Gross, *Convicting the Innocent*, 4 ANN. REV. L. & SOC. SCI. 173, 179 (2008) (noting that police officers are under “extraordinary pressure to secure convictions for heinous crimes”).

²⁰⁷ See *id.* at 178.

²⁰⁸ See *supra* note 158 (collecting conflicting evidence on this issue); cf. *supra* Table 2 (finding sporadic effect of police resources on clearances).

²⁰⁹ Cassell & Fowles, *supra* note 5, at 1090.

²¹⁰ These figures are derived by subtracting the post-*Miranda* rates from the pre-*Miranda* rates listed in Seeburger & Wettick, *supra* note 87, at 11 tbl.1.

²¹¹ *Id.* at 21 tbl.9 (finding overall clearance rates in Pittsburgh higher after *Miranda* than before).

all homicides; in the thirteen months after, they also cleared 94.4% (thirty-four of thirty-six) of all homicides—even though homicide confessions fell sharply.²¹² While it would have been feasible for the Pittsburgh police to devote the necessary resources to solve thirty-four homicides with fewer confessions, it would have been virtually impossible to deal with the large decline in the number of robbery confessions. Before *Miranda*, the Pittsburgh police cleared 45.1% (970 of 2152) of all robberies; after *Miranda*, they cleared only 30.8% (556 of 1805).²¹³ If similar trends occurred around the United States, police departments may have shifted resources to keep homicide clearance rates high at the expense of the clearance rates for some other less serious offenses, such as robbery. However, this reading of the Pittsburgh study does not explain why post-*Miranda* clearances rose slightly for burglary and vehicle thefts in that city²¹⁴ (although the post-*Miranda* increase in burglary is consistent with our finding of no *MIRANDA* effect for burglary).

Another reason why we found no *MIRANDA* effect for homicide may be that we did not account for changing homicide patterns. Homicide, more than any other violent crime, exhibits a long-term decline in clearance rates since 1950. It is quite likely that at least some part of this drop is attributable to the increase in the proportion of felony-type murders and the corresponding decline in murders within the family or as a result of “romantic triangles and lovers’ quarrels.”²¹⁵ Presumably the family and romantic homicides are easier to solve, whereas the felony-type murders, often committed by strangers, are less so.²¹⁶ We have not accounted for these changes because of the difficulty in obtaining data for the relevant time period.²¹⁷ It is possible that these changes have obscured any *MIRANDA* effect in the homicide regressions.

If changes in the patterns of homicides could have obscured a *Miranda*-induced drop in clearance rates, could changes in the patterns of other crimes have caused a drop in clearance rates for those crimes that coincided with *Miranda*? It seems improbable that crime patterns would have changed suddenly enough to explain the kind of sharp 1966-to-1968 drop that we observed in the robbery category, for example. In any event, there were two crimes for which patterns were relatively stable during the late 1960s: robbery and larceny.²¹⁸

²¹² *Id.*

²¹³ *Id.*

²¹⁴ *See id.*

²¹⁵ Cassell & Fowles, *supra* note 5, at 1091 (quoting UCR-1993, *supra* note 79, at 285).

²¹⁶ *See* Litwin & Yu, *supra* note 152, at 96.

²¹⁷ Cassell & Fowles, *supra* note 5, at 1091 n.163 (“FBI data before 1965 on offender-victim relationships in homicide cases do not appear to be regularly published in a consistent format.”).

²¹⁸ Lawrence E. Cohen & Marcus Felson, *Social Change and Crime Rate Trends: A Routine Activity Approach*, 44 AM. SOC. REV. 588, 600 tbl.5 (1979). The authors report offense trends for only four crimes: robbery, burglary, larceny, and murder. *Id.* Although their analysis is based on data apparently collected as part of the UCR program, the data do not

Since we found a *MIRANDA* effect on both of these crimes, our *MIRANDA* effect does not appear to be an artifact of changing crime patterns.

Still another explanation for our pattern of findings rests on the issue of so-called “secondary clearances.” While we defer full discussion of such clearances until later,²¹⁹ police may clear certain kinds of crimes through interrogations more frequently than other kinds of crimes. For example, police may press an arrested robber to confess to other similar robberies he has committed. Such repeated crimes (and the possibility of multiple clearances) may not exist as frequently for crimes like assault, which may typically consist of a single, unrepeatable act. A study of the NYPD around the time of *Miranda* compiled ratios of clearances to arrests across crime categories.²²⁰ The ratio of clearances to arrests greatly exceeds 1.0 for some crimes—specifically burglary, grand larceny, grand larceny vehicle, and robbery.²²¹ For grand larceny vehicle, for example, the ratio was 2.416, meaning that, for each vehicle larceny arrest, police cleared about two-and-a-half such crimes. No doubt a substantial number of these additional clearances came from confessions. On the other hand, for other crimes—specifically homicide, rape, and assault—the ratio was quite close to 1.0. Presumably murderers and rapists rarely confess to more than one crime. This suggests that confessions may play a more important role for crimes such as vehicle theft, larceny, and robbery, and that clearance for these crimes are, therefore, more susceptible to changes in confession procedures. Again, the one crime that does not fit the expected pattern is burglary. Burglary had the highest ratio (3.778), but we did not find a *MIRANDA* effect for burglary. Perhaps more research on these issues will shed further light on burglary clearances.

III. MODEL SPECIFICATION ISSUES: FURTHER ANALYSIS OF JOHN DONOHUE’S SPECIFICATIONS

We have just described the results produced with our “specification” of regression equations—that is, the results produced with our chosen variables. While we have explained why we chose these variables,²²² this specification issue is an important one worth considering further. Improper specification of equations can lead to inaccurate results. Indeed, a concern is that, through improper specification, a researcher can produce a predesired or otherwise spurious result.²²³

appear to be published in the annual crime reports and it is unclear whether the data are readily available. Cassell & Fowles, *supra* note 5, at 1091 n.164.

²¹⁹ See *infra* notes 370-71, 452-99 and accompanying text.

²²⁰ PETER W. GREENWOOD, N.Y.C. RAND INST., AN ANALYSIS OF THE APPREHENSION ACTIVITIES OF THE NEW YORK CITY POLICE DEPARTMENT 24 tbl.3 (1970).

²²¹ See *id.* The following ratios of clearance rate to arrest rate can be derived from Greenwood’s data: 1.045 for homicide; 1.063 for rape; 1.660 for robbery; 1.073 for assault; 3.778 for burglary; 2.564 for grand larceny; and 2.416 for grand larceny vehicle. See *id.*

²²² See *supra* notes 144-85 and accompanying text.

²²³ A classic paper on this issue is Edward E. Leamer, *Let’s Take the Con out of*

This Section explores the specification issue. We are aided in this exploration by the fact that, after we circulated our 1998 paper for publication, John Donohue wrote a thoughtful response, carefully discussing (among other things) specification issues and reporting the results produced with his different specifications.²²⁴ At the time, we wrote a brief reply to Donohue, explaining how we believed that his specifications required some unusual assumptions, which explained why his equations produced somewhat fewer statistically significant *MIRANDA* effects than we reported.²²⁵ Now with the benefit of nearly two decades since that exchange, we revisit the specification issue. Time has given us two advantages: (1) an additional stream of FBI clearance rate data from the last two decades; and (2) advances in computing power and related econometric methods that allow specification issues to be more aggressively addressed. Both of these developments provide some additional support for our conclusion that *Miranda* has harmed law enforcement.

A. *The Donohue Model with Data Extended Through 2012*

Our clearance rate model here is essentially the same model that we used in our 1998 *Stanford Law Review* article.²²⁶ The model we use here produces results that parallel our 1998 results in many respects. Specifically, comparing our current equations (which use a three-year *MIRANDA* phase in) with our 1998 results (which use a three-year phase in), we now find a *MIRANDA* effect for five of nine FBI categories compared to six of the same nine categories in 1998. The one difference between our current equations and the 1998 equations is the individual crime category of burglary, for which *MIRANDA* exhibited a statistically significant negative coefficient in 1998, but not in our current model.²²⁷

In 1998, Donohue wrote a response that was generally supportive of some of our most significant conclusions. Donohue began by acknowledging that focusing on clearance rates (rather than confession rates) would probably significantly understate quantification of *Miranda*'s harmful effects.²²⁸ He also noted that we "beg[a]n at somewhat of a disadvantage since" we were forced to "base [our] study on an interrupted time series analysis stemming from a single federally imposed mandate, rather than on the more desirable type of panel data analysis, which examines the experience of different states over time."²²⁹

Econometrics, 73 AM. ECON. REV. 31, 36-39 (1983).

²²⁴ See generally Donohue, *supra* note 7.

²²⁵ See generally Paul G. Cassell & Richard Fowles, *Falling Clearance Rates After Miranda: Coincidence or Consequence?*, 50 STAN. L. REV. 1181 (1998).

²²⁶ The one difference is that we substituted violent crimes for index crimes as the measure of police workload, for reasons discussed in *supra* note 155.

²²⁷ Compare Cassell & Fowles, *supra* note 5, at 1096 tbl.IV, with *supra* Table 4.

²²⁸ See Donohue, *supra* note 7, at 1156.

²²⁹ *Id.* at 1157.

We provided our data to Donohue so that he could run regression equations with his own, alternative specifications. As with our equations then (and now), Donohue's equations produced negative *MIRANDA* effects²³⁰ across all aggregate and individual crime categories.²³¹ Donohue's equations, however, found fewer statistically significant effects than our equations. While our equations found statistically significant negative *MIRANDA* effects at the conventional 95% confidence level for six of the nine categories,²³² Donohue found such negative effects for only two: violent crimes and larceny.²³³ Donohue also found such negative effects at the 90% confidence level for property crimes and vehicle thefts.²³⁴

The difference between our equations and Donohue's equations came down to specification. Donohue's equations included, in addition to an identically constructed *MIRANDA* variable, variables for the violent crime rate, police officers (per capita), police officers/number of violent crimes, police expenditures (per capita), police expenditures/number of violent crimes, crime in small cities, time, and time squared.²³⁵ In addition to jettisoning noncriminal justice variables, Donohue made three assumptions different from ours: (1) that violent crimes, rather than index crimes, should be the independent variable measuring police workload; (2) that inclusion of a time-squared variable (in addition to a time variable) was appropriate; and (3) that the appropriate measure of police capacity was a measure of officers rather than total employees.²³⁶ Eliminating any of these three assumptions produced much stronger *MIRANDA* effects.²³⁷

Given that time has marched on for nearly two decades since our competing papers were published, we wondered whether, with the benefit of extra data, the Donohue specifications would reveal anything more about the *Miranda* effect. Sometimes with additional time—and additional data—patterns more clearly reveal themselves. Accordingly, we simply took Donohue's original specifications and re-ran his equations using the additional data extending from 1950 to 2012 that we assembled here—an additional seventeen years of data—

²³⁰ Donohue chose to relabel the dummy variable "Post-1966," arguing that this was a more "neutral" term. *Id.* at 1163 n.74. We believe that labeling dummy variables by the effect they are designed to capture is a standard approach, although we acknowledge that further evidence is required beyond regression equations to explain why it is proper to attribute the effect indicated by the dummy variable to *Miranda*. We discuss this "causality" question at greater length later in this Article. *See infra* Part VI.

²³¹ Donohue, *supra* note 7, at 1176 tbl.IV, 1177 tbl.V.

²³² Cassell & Fowles, *supra* note 5, at 1086 tbl.II, 1088 tbl.III.

²³³ Donohue, *supra* note 7, at 1176 tbl.IV, 1177 tbl.V.

²³⁴ *Id.* at 1177 tbl.V. Donohue's coefficients for *MIRANDA* are also slightly different than ours, as he used the natural log of the clearance rates rather than the clearance rates themselves. *See id.* at 1160.

²³⁵ *Id.* at 1173 tbl.I.

²³⁶ Cassell & Fowles, *supra* note 225, at 1185-87.

²³⁷ *Id.* at 1186-87, 1190 tbl.I.

instead of the 1950-to-1995 data that we had assembled for our first article. For reasons that we will explain shortly, we also ran Donohue's equations (and our equations) starting in 1950 but stopping after 2007—the onset of the Great Recession. Table 6 reports the results of these various equations.

**Table 6. Aggregate and Individual Crimes:
Coefficients of the *MIRANDA* Variable—Alternative Specifications by
Cassell/Fowles and Donohue
(three-year *Miranda* phase in)
OLS Regressions on Clearance Rates for Cities (*t* statistics in parenthesis)**

	Violent	Murder	Rape	Robbery	Assault	Property	Burglary	Larceny	Vehicle
Cassell/Fowles (1950-1995)	9.057 (4.633) ^{***}	-3.084 (-1.354)	-0.879 (-0.287)	-6.383 (-3.013) ^{**}	-2.842 (-1.360)	-3.030 (-4.732) ^{***}	-3.337 (-3.119) ^{**}	-3.319 (-4.092) ^{***}	-5.231 (-3.608) ^{***}
Donohue (1950-1995) (natural log)	-0.117 (-2.927) ^{**}	-0.051 (-0.918)	-0.033 (-0.539)	-0.009 (-1.568)	-0.026 (-0.626)	-0.097 (-1.907) [†]	-0.075 (-0.880)	-0.0824 (-1.413)	-0.150 (-1.763) [†]
Cassell/Fowles (1950-2012)	-9.446 (-4.991) ^{***}	-1.005 (-0.453)	-3.501 (-1.497) ^{**}	-3.501 (-1.497) ^{**}	-2.762 (-1.459)	-2.221 (-2.614) [†]	-1.494 (-1.415)	-2.071 (-1.052) [†]	-5.516 (-5.151) ^{***}
Cassell/Fowles (1950-2007)	-10.610 (-5.761) ^{***}	-2.003 (-.922)	-3.956 (-1.598)	-6.790 (-3.794) ^{***}	-3.559 (-1.871) [†]	-3.020 (-4.471) ^{***}	-2.209 (-2.374) [*]	-2.917 (-1.476) [†]	-5.948 (-5.449) ^{***}
Donohue (1950-2012)	-7.338 (-3.788) ^{***}	-1.435 (-0.650)	-6.542 (-2.264) [†]	-4.816 (-2.859) ^{**}	-2.217 (-1.249)	-1.527 (-1.868) [†]	-1.385 (-1.720) [†]	-0.469 (-0.409)	-5.427 (-4.935) ^{***}
Donohue (1950-2007)	10.078 (-6.282) ^{***}	-3.004 (-1.477)	-10.100 (-3.588) ^{***}	-6.498 (-3.661) ^{***}	-4.036 (-2.35) [*]	-2.855 (-4.185) ^{***}	-1.121 (-1.256)	-2.439 (-1.825) [†]	-5.410 (-4.376) ^{***}

*** significant at .001 level ** significant at .01 level * significant at .05 level

† significant at .10 level

As shown in Table 6, the Donohue specification now largely replicates our (current) findings, and completely replicates our findings if the data set is limited to 2007 (rather than 2012). Indeed, on this extended data set, Donohue's specifications produce statistically significant results at the conventional 95% confidence level for even more categories (six of the nine) than do ours.

This convergence of the results from our equations with those from Donohue's equations is an important finding. Donohue set out to explore our regression equations and, independently of our efforts, specified his own alternative model. He then used this model to suggest that, while we had provided "some evidence" that *Miranda* harmed law enforcement, our evidence was not yet conclusive.²³⁸ The fact that even Donohue's own equations now reproduce our findings is an important step in the direction of proof on which policy recommendations can be made.²³⁹

A further step in that direction comes from considering the results of Donohue's equations (and ours) if we run the equations on data stopping at 2007. Specifying the length of the data series on which to run a time series regression is an important issue, since results can sometimes be affected by length of the data set chosen.²⁴⁰ In our 1998 article, we showed that our *MIRANDA* effect was not sensitive to the time periods we selected for running the regressions. We got almost identical results in our equations not only with a full data set available to us (1950 to 1995), but also with a data set that excluded potentially problematic data from the 1950s (i.e., a data set from 1960 to 1995) and also a data set shortened by fifteen years (i.e., a data set from 1950 to 1980).²⁴¹ The only difference we found was that, for the individual crime of burglary, the 1950 to 1980 data set produced results significant only at the 90% confidence level.²⁴² Interestingly, burglary is also the only individual crime that drops out of statistical significance in our current equations.

We are now in a position to extend that conclusion, by showing that our results hold, despite an additional seventeen years of data. But by extending the time period covered by the data comes the possibility that new and important events will creep into the equations. In extending the data from 1995 to 2012, we were concerned about a possibly impactful event: the Great Recession. According to the U.S. Bureau of Economic Research (the arbiter of such things), the United States economy entered a recession in December 2007 that extended for eighteen

²³⁸ Donohue, *supra* note 7, at 1171.

²³⁹ See Aneja, Donohue & Zhang, *supra* note 134, at 614 ("Researchers and policy makers should keep an open mind about controversial policy topics in light of new and better empirical evidence or methodologies.").

²⁴⁰ Cassell & Fowles, *supra* note 5, at 1098-99. For an illustration of this problem, see Aneja, Donohue & Zhang, *supra* note 134, at 601-06 (running "right-to-carry" law regressions over different time periods).

²⁴¹ Cassell & Fowles, *supra* note 5, at 1100 tbl.VI.

²⁴² *Id.*

months, ending in June 2009.²⁴³ The Great Recession was, “by most measures[, the] worst economic recession since the Great Depression” of the early 1930s.²⁴⁴ The widespread harms included unprecedented job losses and a significant rise in the unemployment rate.²⁴⁵ It also had worldwide effects, spreading to create “the worst recession the world has witnessed for over six decades.”²⁴⁶

Because of its significant economic effects, we wondered whether the Great Recession would have had unpredictable (and uncontrolled) effects on our regression equations. While the available evidence suggests that the Great Recession did not significantly influence overall crime rates in the aggregate,²⁴⁷ some crime patterns changed that could have influenced clearance rates, particularly with regard to property crimes.²⁴⁸ Additionally, the Great Recession could have affected other variables in our and Donohue’s equations. Both sets of equations include variables that could have been affected by economic changes, such as (for Donohue’s equations) dollars spent on law enforcement (a variable which is, in turn, inflation adjusted) and (for our equations) labor force participation, unemployment rate, and per capita income. Given the potentially significant effects, we decided to run our equations (and Donohue’s equations) stopping at 2007—the start of the Great Recession.

As shown in Table 6 above, both sets of equations run on the data from 1950 to 2007 produce more statistically significant *MIRANDA* effects. In our equations, we found statistically significant *MIRANDA* effects for violent and property crime clearances, as well as for robbery, assault (at the 90% confidence

²⁴³ *US Business Cycle Expansions and Contractions*, NAT’L BUREAU ECON. RES., <http://www.nber.org/cycles.html> [<https://perma.cc/7J4X-7SK9>] (last visited Jan. 29, 2017).

²⁴⁴ *Chart Book: The Legacy of the Great Recession*, CTR. ON BUDGET & POL’Y PRIORITIES, <http://www.cbpp.org/research/economy/chart-book-the-legacy-of-the-great-recession?fa=view&id=3252> [<https://perma.cc/DY2Z-CECF>] (last updated Feb. 10, 2017).

²⁴⁵ *Id.*

²⁴⁶ SHER VERICK & IYANATUL ISLAM, INST. FOR THE STUDY OF LABOR, *THE GREAT RECESSION OF 2008-2009: CAUSES, CONSEQUENCES AND POLICY RESPONSES* 3 (2010), <http://ftp.iza.org/dp4934.pdf> [<https://perma.cc/T7KC-4AMS>].

²⁴⁷ See CHRISTOPHER UGGEN, STANFORD CTR. ON POVERTY & INEQUALITY, *CRIME AND THE GREAT RECESSION* 1, http://users.soc.umn.edu/~uggen/crime_recession.pdf [<https://perma.cc/TQQ9-JFBT>] (last visited Jan. 29, 2017); James Q. Wilson, *Crime and the Great Recession*, CITY J., Summer 2011, at 90, 90.

²⁴⁸ For example, from 2006 to 2010, there was a 21% increase in shoplifting crimes, UCR-2010, *supra* note 79, at 90 tbl.7, which generally have extremely high clearance rates, *see infra* notes 440-41 and accompanying text. Also, motor vehicle thefts fell precipitously, by 38% from 2006 to 2010. UCR-2010, *supra* note 79, at 90 tbl.7. Perhaps related to this decline, larceny of motor vehicle accessories (included in the larceny category) fell by 14% from 2006 to 2010. *See id.* In contrast to other crimes’ clearance rates, larceny clearance rates show a sharp upward trend beginning around 2006. *See supra* Figure 6. We are not certain why this occurred, although the possibility of improved security technologies has been suggested as a general explanatory factor. *See* Michael Tonry, *Why Crime Rates Are Falling Throughout the Western World*, 43 CRIME & JUST. 1, 5 (2014).

level), burglary, larceny, and vehicle theft clearances. Using the Donohue specification, we found *MIRANDA* effects for violent and property crime clearances, as well as for rape, robbery, assault, larceny, and vehicle theft, all statistically significant at 95% confidence or (for violent, rape, robbery, property, larceny, and vehicle theft) at the 99% confidence level or greater. These results, too, give us greater confidence in the robustness of our conclusion that *Miranda* reduced clearance rates.

B. *Bayesian Model Averaging and the Cassell/Fowles and Donohue Specifications*

The specification issue that we are concerned with can also be addressed in a more rigorous fashion. Historically, uncertainty about which model specification was “correct” was a subject on which classical econometric methods offered little guidance. But recently, interest in Bayesian approaches has grown to address this problem.²⁴⁹

A researcher attempting to quantitatively explore a phenomenon (such as, in this case, crime clearance rates) will likely encounter uncertainty about which variables to include in statistical models. Typically, a researcher must develop a theoretical model that contains some explanatory variables, but the precise set of explanatory variables to include is uncertain.²⁵⁰ More worrisome, a researcher could try a series of alternative specifications until discovering one that “works”—i.e., one that produces a statistically significant result²⁵¹ (or, if trying to debunk a particular theory, one that does not produce a statistically significant result).

Conventionally reported statistical significance measures (such as the *t*-statistics we and Donohue have both reported) are of little use in assessing such concerns. These statistics show statistical significance within a particular model. But they do not help answer the question of whether the model itself is correct. Issues of model uncertainty related to the choice of which variables to include

²⁴⁹ See generally ANDREW GELMAN ET AL., *BAYESIAN DATA ANALYSIS* (3d ed. 2014); PETER KENNEDY, *A GUIDE TO ECONOMETRICS* 213, 216-31 (6th ed. 2008); Fowles & Loeb, *supra* note 135, at 52. For an interesting historical account of early uses of Bayesian methods, see Duo Qin, *Bayesian Econometrics: The First Twenty Years*, 12 *ECONOMETRIC THEORY* 500, 503-13 (1996).

²⁵⁰ See Jacob M. Montgomery & Brendan Nyhan, *Bayesian Model Averaging: Theoretical Developments and Practical Applications*, 18 *POL. ANALYSIS* 245, 246-54 (2010).

²⁵¹ Alan Gerber & Neil Malhotra, *Do Statistical Reporting Standards Affect What Is Published? Publication Bias in Two Leading Political Science Journals*, 3 *Q.J. POL. SCI.* 313, 314 (2008) (“[R]esearchers may engage in data mining to find model specifications and subsamples that achieve significance thresholds.”); see also Daniele Fanelli, *Negative Results Are Disappearing from Most Disciplines and Countries*, 90 *SCIENTOMETRICS* 891, 892-93 (2012); cf. Joseph P. Simmons, Leif D. Nelson & Uri Simonsohn, *False-Positive Psychology: Undisclosed Flexibility in Data Collection and Analysis Allows Presenting Anything as Significant*, 22 *PSYCHOL. SCI.* 1359, 1359-62 (2011) (discussing problems when researchers report only equations that “worked”).

in a regression are paramount to problems of simultaneity and multicollinearity. In particular, problems emerge when the associated explanatory variables are correlated within a regression model.

As a consequence of problems such as these, reported econometric results are sometimes fragile to even slight changes in model specification.²⁵² Writing in this Symposium, Alschuler nicely flagged this concern when he wrote, with regard to law-related regression analyses, that most “seem to collapse as soon as one breathes on them. In particular, I have never seen any work by an econometrician that convinced me of anything.”²⁵³

Bayesian model averaging (“BMA”) attempts to address concerns like Alschuler’s by trying to assess robustness of regression results with regard to alternative specifications.²⁵⁴ We refer our (largely legal) audience to other technical literature (including articles previously cowritten by Fowles²⁵⁵) for specific descriptions of how the procedure works.²⁵⁶ But, in brief, BMA looks at all conceivable model specifications and then weights them by their posterior probabilities.²⁵⁷ For example, if there are n number of variables that might be included in a regression equation, then BMA consider all 2^n conceivable discrete models and determines whether the variable in question remains significant across those various specifications.²⁵⁸ It appears to be generally accepted that “BMA can help applied researchers to ensure that their estimates of the effects of key independent variables are robust to a wide range of possible model specifications.”²⁵⁹ It is also generally agreed that BMA can be a useful corrective for the (apparently widespread) problem of researchers selectively reporting only models that “work.”²⁶⁰ In the last few years, BMA has become commonly used in econometric literature.²⁶¹

²⁵² Montgomery & Nyhan, *supra* note 250, at 246. For an illustration of this problem, see the spirited empirical debate over whether “right-to-carry” firearms laws reduce crime. Aneja, Donohue & Zhang, *supra* note 134, at 614-15. See generally LOTT, *supra* note 134.

²⁵³ Alschuler, *supra* note 40, at 889 n.186.

²⁵⁴ See David Weisbach, *Introduction: Legal Decision Making Under Deep Uncertainty*, 44 J. LEGAL STUD. S319, S332 (2015).

²⁵⁵ See Gail Blattenberger, Richard Fowles & Peter D. Loeb, *Variable Selection in Bayesian Models: Using Parameter Estimation and Non Parameter Estimation Methods*, in 34 ADVANCES IN ECONOMETRICS: BAYESIAN MODEL COMPARISON 249, 261-65 (Ivan Jeliazkov & Dale J. Poirier eds., 2014); Blattenberger, Fowles & Loeb, *supra* note 136, at 119; Blattenberger, Fowles, Loeb & Clarke, *supra* note 136, at 1829.

²⁵⁶ See, e.g., Montgomery & Nyhan, *supra* note 250, at 247-49.

²⁵⁷ Blattenberger, Fowles & Loeb, *supra* note 255, at 261.

²⁵⁸ *Id.*

²⁵⁹ Montgomery & Nyhan, *supra* note 250, at 246.

²⁶⁰ See Leslie K. John, George Loewenstein & Drazen Prelec, *Measuring the Prevalence of Questionable Research Practices with Incentives for Truth Telling*, 23 PSYCHOL. SCI. 524, 525 (2012).

²⁶¹ Tiago M. Fragoso & Francisco Louzada Neto, *Bayesian Model Averaging: A Systematic Review and Conceptual Classification*, 16 tbl.2 (Sept. 29, 2015),

Recent advances in computing power have promoted adoption of BMA by making BMA calculations feasible.²⁶² In the context of our clearance rate equations here, given that our model has thirteen independent (explanatory) variables, the total number of alternative model specifications is 8192 (2 to the 13th power). Similarly, given that Donohue's model has ten independent variables,²⁶³ the total number of alternative models is 1024 (2 to the 10th power). Without adequate computer processing speed, it would not previously have been possible to assess all these alternatives.²⁶⁴ But now, more powerful computers and readily available software packages allow researchers to use BMA to assess all these different possibilities.²⁶⁵

We used the standard BMA package in R, which is readily available and well documented.²⁶⁶ We used the standard odds ratio of 1:20 for model inclusion. Our results for the Cassell/Fowles model, using our full data set (1950 to 2012), are reported in Table 7.

<https://arxiv.org/pdf/1509.08864v1.pdf> [<https://perma.cc/J2AZ-GVFG>].

²⁶² KENNEDY, *supra* note 249, at 217 (“In recent years these practical difficulties have been greatly alleviated by the development of appropriate computer software . . .”). Before BMA became practical, it was possible to conduct Extreme Bounds Analysis (“EBA”) to make similar fragility determinations. *See* Blattenberger, Fowles & Loeb, *supra* note 255, at 255-56 (“[EBA] is a methodology of global sensitivity analysis that computes the maximum and minimum values for Bayesian posterior means in the context of linear regression models.”). EBA calculated the maximum and minimum coefficients that could be obtained using maximum likelihood estimation over all possible linear combinations of explanatory variables. Cassell & Fowles, *supra* note 5, at 1104. In our 1998 paper, we reported EBA statistics showing that our results were not fragile. *Id.* at 1105. For further discussion of the differences between earlier EBA analysis and current BMA analysis, see Blattenberger, Fowles & Loeb, *supra* note 255, at 255-58, 261-65.

²⁶³ Donohue, *supra* note 7, at 1173 tbl.1.

²⁶⁴ *See* KENNEDY, *supra* note 249, at 213.

²⁶⁵ *Id.*

²⁶⁶ Blattenberger, Fowles & Loeb, *supra* note 255, at 262, 277 n.14, 278 (citing Adrian Raftery et al., *BMA: Bayesian Model Averaging*, CRAN.R-PROJECT (Nov. 6, 2015), <https://cran.r-project.org/web/packages/BMA/index.html> [<https://perma.cc/ECZ3-3T8W>]); *see also* ANDREW GELMAN & JENNIFER HILL, *DATA ANALYSIS USING REGRESSION AND MULTILEVEL/HIERARCHICAL MODELS* 10-11 (2007) (advocating for the use of *R* software when conducting Bayesian analysis).

Table 7. Bayesian Model Average of *MIRANDA* Variable Inclusion in Cassell/Fowles Specifications—1950-2012
 (three-year *Miranda* phase in)
 Regressions on Clearance Rates for Cities
 Cassell/Fowles Specification (Odds Ratio of 1:20 for Models Inclusion)

Clearance Rate Data	<i>MIRANDA</i> in Percent of Equations	<i>MIRANDA</i> in Percent of top 5 Equations	Bayes Average Coefficient	Number of Models
Violent Crimes 1950-2012	100.0%	100%	-10.110	99
Murder 1950-2012	10.2%	0%	0.093	14
Rape 1950-2012	13.6%	20%	-0.281	17
Robbery 1950-2012	100.0%	100%	-7.092	27
Aggravated Assault 1950-2012	44.6%	40%	-1.481	54
Property Crimes 1950-2012	78.8%	100%	-1.180	28
Burglary 1950-2012	42.9%	60%	-0.809	25
Larceny 1950-2012	60.9%	80%	-1.069	30
Vehicle Theft 1950-2012	100.0%	100%	-5.122	21

Shaded areas denote crimes for which *MIRANDA* variable is found in at least four of the top five equations.

Since some of our readers may not be familiar with the standard statistical reporting for BMA results, we will describe the first row of the table in some detail. This row reports BMA results for violent crime clearance rates using the data set 1950 to 2012. The BMA procedure considered all 8192 possible specifications of our equations—i.e., all different combinations of the thirteen explanatory variables we had identified. The procedure then selected equations that had odds of greater than 5% of being the correct model. BMA sorts through these 8192 models and retains those that are supported by the evidence and discards models whose support is low. From a Bayesian perspective, it is perfectly sensible to calculate a given model's posterior probability, $P(D/M_i)$, where M_i represents the i^{th} model and D represents the observed data. When two models are compared, a selection decision comes down to either dropping one of the models from consideration or keeping both of them. The mechanism to assist in making this decision is the ratio of the posterior probabilities. If the odds ratio is relatively close to 1.0, the two candidate models are kept; otherwise, one model is retained and the other eliminated. With our choice of 1:20, the odds window retains a large number of plausible models, but significantly fewer than all possible 1.0s. As noted above, posterior model probabilities are also used as

the weights applied to the estimated coefficients for the retained models when computing Bayesian average.

In this case, the BMA procedure identified ninety-nine out of 8192 models as being most likely correct. Of these 99 identified models, the *MIRANDA* variable was included in 99 of the 99 identified models (100%). Typically, posterior model probabilities drop quickly, so BMA also identified the top five models and, in these, *MIRANDA* was included in all five (100%). The average coefficient generated from these equations is -10.110, meaning that the BMA-selected models had an average negative coefficient associated with *MIRANDA* of -10.111. The remaining rows in Table 7 report the same data for each of the other eight crime categories of clearance rates we are investigating. Strong results are shown for robbery, property crimes, larceny, and vehicle theft—particularly for robbery and vehicle theft (100% inclusion).

As discussed in the preceding Section, we were concerned about the Great Recession's effect on our models. BMA can reveal which equations are selected if we confine our data to 1950 to 2007, as shown in Table 8.

**Table 8. Aggregate and Individual Crimes:
Bayesian Model Average of *MIRANDA* Variable Inclusion—1950-2007**
(three-year *Miranda* phase in)
Regressions on Clearance Rates for Cities
Cassell/Fowles Specification (Odds Ratio of 1:20 for Models Inclusion)
(data for 1950-2007)

Clearance Rate Data	<i>MIRANDA</i> in Percent of Equations	<i>MIRANDA</i> in Percent of Top Five Equations	Bayes Average Coefficient	Number of Models
Violent Crimes 1950-2007	100.0%	100%	-8.482	44
Murder 1950-2007	11.8%	20%	0.207	38
Rape 1950-2007	13.0%	0%	-0.303	44
Robbery 1950-2007	100.0%	100%	-5.773	19
Aggravated Assault 1950-2007	76.5%	80%	-2.631	44
Property Crimes 1950-2007	100.0%	100%	-2.778	22
Burglary 1950-2007	73.2%	80%	-1.727	19
Larceny 1950-2007	99.1%	100%	-2.504	37
Vehicle Theft 1950-2007	100.0%	100%	-5.621	25

As this table shows, we have even stronger *MIRANDA* findings if we confine our data to data unaffected by the Great Recession. Not only do clearance rates for violent crimes, robbery, and vehicle theft show up in 100% of the equations, but property crimes (100%) and larceny (99.1%) show up almost invariably as well. Given the possibility that recessionary influences may have had some bearing on property crime clearance rates, this result is interesting.

Of course, BMA permits us to examine not just the robustness of our equations but also of Donohue's equations. Table 9 reports the BMA results for the Donohue equations, using the full data set (1950-2012).

Table 9. Bayesian Model Average of *MIRANDA* Variable Inclusion in Donohue Specifications—1950-2012
(three-year *Miranda* phase in)
Regressions on Clearance Rates for Cities
Donohue Specification (Odds Ratio of 1:20 for Models Inclusion)
(data for 1950-2012)

Clearance Rate Data	<i>MIRANDA</i> in Percent of Equations	<i>MIRANDA</i> in Percent of Top Five Equations	Bayes Average Coefficient	Number of Models
Violent Crimes 1950-2012	100.0%	100%	-9.090	46
Murder 1950-2012	10.3%	0%	-0.100	22
Rape 1950-2012	75.9%	80%	-4.485	19
Robbery 1950-2012	95.8%	100%	-4.476	50
Aggravated Assault 1950-2012	37.7%	40%	-1.049	40
Property Crimes 1950-2012	41.0%	20%	-0.691	21
Burglary 1950-2012	20.6%	20%	-0.210	9
Larceny 1950-2012	9.0%	20%	0.022	9
Vehicle Theft 1950-2012	100.0%	100%	-6.161	15

As can be seen, Donohue's equations also produce robust *MIRANDA* findings, particularly for violent crimes (100% inclusion), vehicle theft (100% inclusion), and robbery (95.8% inclusion). BMA can also be used to assess the results of Donohue's equations using the data set up to the Great Recession. Table 10 reports these results.

Table 10. Bayesian Model Average of *MIRANDA* Variable Inclusion in Donohue Specifications—1950-2007
 (three-year *Miranda* phase in)
 Regressions on Clearance Rates for Cities
 Donohue Specification (Odds Ratio of 1:20 for Models Inclusion)
 (data for 1950-2007)

Clearance Rate Data	<i>MIRANDA</i> in Percent of Equations	<i>MIRANDA</i> in Percent of Top Five Equations	Bayes Average Coefficient	Number of Models
Violent Crimes 1950-2007	100.0%	100%	-9.603	11
Murder 1950-2007	33.5%	40%	-0.605	24
Rape 1950-2007	100.0%	100%	-9.625	8
Robbery 1950-2007	100.0%	100%	-6.267	38
Aggravated Assault 1950-2007	42.7%	40%	-1.464	23
Property Crimes 1950-2007	100.0%	100%	-2.366	18
Burglary 1950-2007	18.8%	20%	-0.180	10
Larceny 1950-2007	85.8%	100%	-1.555	29
Vehicle Theft 1950-2007	100.0%	100%	-6.509	39

As can be seen, BMA shows that Donohue's equations, when confined to prerecession data, produce robust *MIRANDA* effects for many different crimes, including violent crimes (100% inclusion), rape (100% inclusion), robbery (100% inclusion), property crimes (100% inclusion), vehicle theft (100% inclusion), and larceny (85.8% inclusion).

In light of these findings, we think it is fair to say that our *MIRANDA* effects will not "seem to collapse as soon as one breathes on them," in the colorful language of Alschuler.²⁶⁷ To the contrary, the great bulk of our findings (and even many similar findings by Donohue) are insensitive to model specification, as shown by the BMA procedure which assessed, quite literally, thousands of possible alternative specifications.

C. *Simultaneity Issues*

This may also be the appropriate point for a brief discussion of simultaneity issues. As we discussed with Donohue in our 1998 exchange, our equations are reduced-form models—that is, we have specified only a single causal equation.²⁶⁸ This requires the assumption that crime clearance rates were explained by various variables, but not vice versa. However, crime clearance rates could influence the explanatory variables. In particular, a drop in the clearance rate might cause crime rates to rise, because the lower the chance of

²⁶⁷ Alschuler, *supra* note 40, at 889 n.186.

²⁶⁸ Cassell & Fowles, *supra* note 5, at 1101-03; Donohue, *supra* note 7, at 1168.

apprehension, the greater the expected rewards to crime. Such a possibility is known as “simultaneity.”²⁶⁹ Our (and Donohue’s) crime clearance rates model, resting as it does on the reduced-form model, does not capture these possible interactions. There is considerable literature suggesting that failure to consider simultaneity can lead to problems in predicting crime rates and the deterrent effects of police.²⁷⁰ However, the issue posed here is a slightly different one: whether failure to control for possible simultaneity affects our conclusions about the *MIRANDA* variable.

Particularly in light of the BMA results, we believe our conclusions are unlikely to have been substantially affected for several reasons. First, it is possible that there is no simultaneity—that is, clearance rates might not directly affect crime rates. While we do not necessarily subscribe to this counterintuitive theory, it is interesting that the literature on police effects on crime is conflicting.²⁷¹ Second, even if simultaneity is an issue, results consistent with those reported here might still be found. Simultaneity can bias results not only upward, but also downward. It can also leave them unchanged. We do not think that simultaneity would explain away the kinds of dramatic shifts in crime clearance rates that we are studying here.

Most importantly, our BMA analysis demonstrates that our results are insensitive to the variables that we include or exclude in the equations. This strongly suggests that simultaneity does not explain our findings, in that we do not detect *MIRANDA* fragility across a vast number of model specifications. Furthermore, the stability of *MIRANDA* is remarkable given the high degree of correlation within the data. In the presence of multicollinearity, it is not uncommon to observe sign switching for focus variables when other variables are added or dropped. Across the vast number of models that BMA estimates, *MIRANDA* remains robust.

We readily acknowledge that, in theory, simultaneous equations for our crime clearance rate model would be the most desirable way to proceed. In practice, however, the specification of such models is often highly dependent on

²⁶⁹ Cassell & Fowles, *supra* note 5, at 1102.

²⁷⁰ *Id.* at 1102 & n.209 (collecting illustrations of this problem).

²⁷¹ See Marian J. Borg & Karen F. Parker, *Mobilizing Law in Urban Areas: The Social Structure of Homicide Clearance Rates*, 35 LAW & SOC’Y REV. 435, 436 (2001) (“[S]tudies have examined the link between clearance or arrest rates and crime rates. Results regarding this relationship are mixed. Although some studies demonstrate a crime-prevention effect of arrests on crime rates, others fail to find consistent evidence that higher clearance rates result in significantly lower crime rates.” (citations omitted)). Compare John E. Eck & Edwards R. Maguire, *Have Changes in Policing Reduced Violent Crime? An Assessment of the Evidence*, in THE CRIME DROP IN AMERICA 207, 217 (Alfred Blumstein & Joel Wallman eds., 2000) (carefully reviewing nine studies, with twenty-seven dependent variables, of the size of police forces and violent crime and finding no “consistent evidence that increases in police strength produce decreases in violent crime”), with Levitt, *supra* note 163, at 176-79 (attributing the crime drop in the 1990s, in part, to increases in the number of police and a rising prison population).

underlying assumptions, particularly for individual crimes (e.g., robbery) in which we are particularly interested.²⁷² Given the great debate over how to model relationships between law enforcement efforts and crime,²⁷³ however, we have decided to avoid this quagmire for present purposes. Instead, we simply leave things where they are: robust findings of many *MIRANDA* effects across both our and Donohue's reduced form specifications of regression equations.

IV. DATA COLLECTION ISSUES: A RESPONSE TO FLOYD FEENEY

Following the publication of our initial *Stanford Law Review* article (and our follow-on exchange with Donohue), Feeney published a detailed response.²⁷⁴ Feeney conceded that our approach of reviewing clearance rate data was likely to significantly understate any harmful effects due to *Miranda*.²⁷⁵ Feeney, however, also advanced three major challenges to the data underlying our premise—the data demonstrating that FBI clearance rates fell sharply after *Miranda*. First, Feeney argued that the clearance rate data we relied on, collected from cities, declined due to artificial (record-keeping) reasons and thus any decline should not be attributed to *Miranda*.²⁷⁶ Second, Feeney argued that the “premier” data on crime clearance rates in the 1960s come from California and that such data show no post-*Miranda* decline.²⁷⁷ Third, and somewhat in tension with his first two claims, Feeney argued that *Miranda*'s adverse effect on clearance rates was due to reductions in police ability to obtain secondary clearances.²⁷⁸

We appreciate the time and attention Feeney devoted in crafting a 114-page response to our original article. We disagree, however, with many of his observations. In this Part and the following Part, we use new data we have collected to show that his three data-based critiques are unpersuasive.²⁷⁹

²⁷² See ZIMRING, *supra* note 163, at 55 (“Models to predict crime generally are not strong; models to predict specific types of crime are even more premature and fragile.”). Shortly after writing our 1998 paper, we attempted to develop simultaneous equations, and the models we tried showed the same strong *MIRANDA* effect as our reduced form equations. See Cassell & Fowles, *supra* note 5, at 1103 n.215. But because we thought those models remained highly sensitive to underlying assumptions, we decided not to pursue the effort further.

²⁷³ See, e.g., Daniel S. Nagin, Robert M. Solow & Cynthia Lum, *Deterrence, Criminal Opportunities, and Police*, 53 CRIMINOLOGY 74, 74 (2015); Greg Pogarsky & Thomas A. Loughran, *The Policy-to-Perceptions Link in Deterrence: Time to Retire the Clearance Rate*, 15 CRIMINOLOGY & PUB. POL'Y 777, 778 (2016); Steven Raphael, *Optimal Policing, Crime, and Clearance Rates*, 15 CRIMINOLOGY & PUB. POL'Y 791, 797-98 (2016).

²⁷⁴ See generally Feeney, *supra* note 8.

²⁷⁵ See *id.* at 5.

²⁷⁶ *Id.* at 4.

²⁷⁷ *Id.* at 4-5.

²⁷⁸ *Id.* at 5-6.

²⁷⁹ Feeney also criticized our conclusion that *Miranda* caused the drop in clearance rates.

A. *Data Collection Problems in the Nation's Cities*

1. Clearance Rate Declines in the Nation's Fourteen Largest Cities

Feeney's lead argument is that changes in police record keeping in large cities caused clearance rates to fall after 1965 for reasons unrelated to *Miranda*.²⁸⁰ Feeney points to, for example, the sharp fall in robbery clearance rates in New York City.²⁸¹ Feeney attributes this decline to record-keeping changes, rather than any actual impairment of the NYPD's ability to clear crimes.²⁸² Feeney then goes on to argue that these record-keeping changes influenced our calculations.²⁸³

Before diving into the details of this argument, we want to set a cautionary note. We are obviously aware that data from individual cities is subject to fluctuation and manipulation. We acknowledged this point in our first article.²⁸⁴ But while such deviations might present a serious problem for analyses of police effectiveness in particular jurisdictions, our focus here is on a Supreme Court decision binding on police forces around the country. Accordingly, we use the aggregate national clearance rate, comprised of clearance reports from thousands of agencies.²⁸⁵ Even if a particular city reported rates in a questionable fashion, our results would be unaffected if any such manipulations did not change significantly in the several years surrounding *Miranda* or if any changes in the manipulations were relatively small in comparison to the total number of reports nationally—both reasonable assumptions.²⁸⁶ We also report results for the aggregated categories of clearance rates for “violent crimes” and “property crimes,” for which interjurisdictional variations in categorizing crimes should

We review this criticism at *infra* notes 529-709 and accompanying text. Feeney also examined clearance rate data from foreign countries. A review of this claim is in progress. *See generally* Cassell, *supra* note 78.

²⁸⁰ *See* Feeney, *supra* note 8, at 18-41.

²⁸¹ *Id.* at 31.

²⁸² *Id.*

²⁸³ *Id.* at 32-33.

²⁸⁴ *See* Cassell & Fowles, *supra* note 5, at 1075-76 (discussing how national aggregation of data mitigates problems with local data collection).

²⁸⁵ *Cf.* Yehuda Grunfeld & Zvi Griliches, *Is Aggregation Necessarily Bad?*, 42 REV. ECON. & STAT. 1, 10 (1960) (“[A]ggregation is not necessarily bad if one is interested in the aggregates.”).

²⁸⁶ *See* FOX, *supra* note 79, at 7 (concluding that the problem of data manipulation is “not overly troublesome” for time series analysis that “does not involve cross-sectional data, but rather a time series from the same population”); Charles R. Tittle & Alan R. Rowe, *Certainty of Arrest and Crime Rates: A Further Test of the Deterrence Hypothesis*, 52 SOC. FORCES 455, 456 (1974) (stating that although manipulations are possible, “there are good reasons to doubt that they greatly contaminate the data” and that they “seem to be distributed throughout the various police departments so that the validity of a study which examines internal variations in the entire body of data . . . would be unaffected” (citations omitted)).

be minimized.²⁸⁷ Also, FBI data collection criteria for “cleared” crimes appear to have remained the same throughout the relevant period.²⁸⁸ So any record-keeping changes would have to have occurred in individual cities for reasons unique to those cities, and with effects presumably confined to those particular cities, not influencing the much larger national aggregates we consider.

Turning specifically to New York City, Feeney attributes the change in record keeping to the election of reform mayor John Lindsay.²⁸⁹ When Lindsay took office at the beginning of 1966, he apparently ordered “honest” reporting of all crimes committed.²⁹⁰ According to Feeney, these changes in reporting practices caused a substantial increase in the number of reported robberies in 1966, with the consequence that the clearance rate declined in New York City—from 42.9% to 17.7%.²⁹¹ Feeney does not appear to have considered the possibility that just as New York City decided to report more crimes, it also reported more clearances for the same crimes. Nor does Feeney discuss the possibility that confession rate declines in New York City were in fact particularly steep, as suggested by the only post-*Miranda* confession rate study in New York City.²⁹²

²⁸⁷ See Gene Swimmer, *The Relationship of Police and Crime: Some Methodological and Empirical Results*, 12 CRIMINOLOGY 293, 304 (1974) (claiming that the impact on the data by variability of reporting techniques is minimized by grouping the types of offenses into larger “property” and “violence” categories); see also FOX, *supra* note 79, at 127 n.8 (“Although the data on the individual Index offenses are available, such disaggregate analyses would be so specific that they would not lend themselves to making general statements about the interrelation of the variables of interest.”).

²⁸⁸ The 1962 UCR Handbook defines a “cleared” crime and provides examples. See U.S. DEP’T OF JUSTICE, FED. BUREAU OF INVESTIGATION, UNIFORM CRIME REPORTING HANDBOOK: HOW TO PREPARE UNIFORM CRIME REPORTS 48-49 (1962) (defining “offenses cleared by arrest” and “exceptional clearances”). The 1965 and 1966 handbooks contain virtually identical definitions. See, e.g., U.S. DEP’T OF JUSTICE, FED. BUREAU OF INVESTIGATION, UNIFORM CRIME REPORTING HANDBOOK 50 (1966) [hereinafter 1966 UCR HANDBOOK] (“An offense is ‘cleared by arrest’ or solved for crime reporting purposes, when at least one person is (1) arrested, (2) charged with the commission of the offense, and (3) turned over to the court for prosecution . . .”). Later versions appear to be substantively indistinguishable. See, e.g., U.S. DEP’T OF JUSTICE, FED. BUREAU OF INVESTIGATION, UNIFORM CRIME REPORTING HANDBOOK 41-42 (1984) (defining “cleared by an arrest” and “exceptional clearances”). It appears that the definition of a “cleared” crime was slightly broadened sometime before the 1960s by allowing police to count as cleared crimes cases in which the offender was “turned over to the court for prosecution” rather than actually requiring the prosecution to take place. See Lawrence W. Sherman, *Defining Arrest: Practical Consequences of Agency Differences (Part I)*, 16 CRIM. L. BULL. 376, 380 (1980).

²⁸⁹ See Feeney, *supra* note 8, at 30.

²⁹⁰ *Id.*

²⁹¹ *Id.* at 31, 32 tbl.5.

²⁹² See *Controlling Crime Through More Effective Law Enforcement: Hearings on S. 300, S. 552, S. 580, S. 674, S. 675, S. 678, S. 798, S. 824, S. 916, S. 917, S. 992, S. 1007, S. 1094, S. 1194, S. 1333, and S. 2050 Before the Subcomm. on Criminal Law & Procedures of the S. Comm. on the Judiciary*, 90th Cong. 1120 (1967) [hereinafter *Controlling Crime Hearings*]

Instead of exploring these issues, Feeney builds on his theory about New York City to suggest that such record-keeping changes explain the drop in clearance rates that we are investigating. But Mayor Lindsay's reforms produced changes in *all* crime categories (with the sole exception of murder—presumably a crime that is hard to fail to report).²⁹³ As discussed earlier, our equations find a *MIRANDA* effect for the categories of robbery, larceny, and vehicle theft, but not murder, rape, assault, and (in most models) burglary. This suggests that the record-keeping phenomenon is not the same phenomenon we are analyzing.

To bolster his conclusions, immediately after reporting his table of New York City data, Feeney reported another table with robbery clearance rate data from the nation's fourteen largest cities (including New York City), as of 1965.²⁹⁴ Quickly eyeballing the numbers, Feeney seems to believe that the data from these fourteen cities raise a question about whether there was any decline in clearance rates after *Miranda* at all. Looking at the data from these fourteen cities, Feeney suggests that they show, in his opinion, "an almost random shifting" or a "mixed trend."²⁹⁵

While Feeney commendably provides a table listing the published and unpublished data for the fourteen cities he relies upon, he does not explain precisely how he determines whether or not this data exhibits any pattern. Moreover, focusing on any individual city presents its own problems. Focusing on smaller individual data sets tends to obscure larger trends—the proverbial missing-the-forest-for-the-trees problem. The smaller the unit from which data is collected, the more likely it is that some random event may influence that data, introducing randomness or "noise" into the data set.²⁹⁶ To provide an obvious

(noting the reduction in confession rates from approximately 49% of nonhomicide felony defendants to 15% following *Miranda*); Weinraub, *supra* note 107, at A1 (reporting that a police spokesperson attributed the decline in clearance rates from 1965 to 1966 in New York City in part to Supreme Court decisions restricting the ability to get multiple confessions). *But cf.* VERA INST. OF JUSTICE, TAPING POLICE INTERROGATIONS IN THE 20TH PRECINCT, N.Y.P.D. 79-80 (1967) (questioning whether *Miranda* could have caused the reported changes in New York City's clearance rate); Nagin, *supra* note 151, at 114-15 (suggesting that more accurate record-keeping policies might explain the decline in the New York City clearance rate).

²⁹³ Compare UCR-1965, *supra* note 79, at 65 tbl.3 (reporting New York City index crimes), with UCR-1966, *supra* note 79, at 170-85 tbl.55 (same).

²⁹⁴ See Feeney, *supra* note 8, at 35-36, 37 tbl.6. Feeney claims that these fourteen cities "account for over 50% of the robberies in the nation in 1966, 1967, and 1968." *Id.* at 36. But the citation he cites to does not support his point. See *id.* at 36 n.92 (citing PHILIP J. COOK, U.S. DEP'T OF JUSTICE, ROBBERY IN THE UNITED STATES: AN ANALYSIS OF RECENT TRENDS AND PATTERNS 11-12 (1983) (noting that in 1981, the nation's fifty-seven cities reported 61% of all robberies)). The UCR for 1966 does not either because summing the total robberies for the nation's twenty-four largest cities in that year does not provide a number of robberies equaling 50% of the nation's total. See UCR-1966, *supra* note 79, at 92 tbl.6.

²⁹⁵ Feeney, *supra* note 8, at 35-36.

²⁹⁶ See GEORGE E. P. BOX, J. STUART HUNTER & WILLIAM G. HUNTER, STATISTICS FOR

example, to discover the effects of *Miranda* on police, we would not want to exclusively look at crime clearance rates from one individual police precinct. Police officers might come and go from the precinct, a new gang might move into the precinct, and so forth, making it hard to generalize from what happened in that small area to the entire country. Of course, similar problems can exist with respect to data from particular cities, as Feeney's own arguments explain. A new mayor or police chief might introduce a different record-keeping system for the police force.²⁹⁷ Or in a particular year, a city might face a budget crunch or the spread of a particularly dangerous addictive drug. Each of these factors in any particular city could have changed clearance rates during the 1966-to-1968 period—thereby introducing noise into the data and obscuring any larger trends that may or may not have existed across the country.

With regard to noise in data, a standard statistical response is averaging. So long as the noise is random with respect to the phenomenon of interest, averaging should help remove the effects of noise on the data being studied.²⁹⁸ Applied to the issues discussed in this Article, while data from any one city might gyrate for unpredictable reasons, the collective data from fourteen cities are less likely to do so. And data from, 140 or 1400 cities, for example, are even less likely to do so. If we are interested in a big picture assessment of a national phenomenon like *Miranda*, that picture will come into sharper focus as we step back and aggregate larger data sets, as Feeney himself appears to agree.²⁹⁹

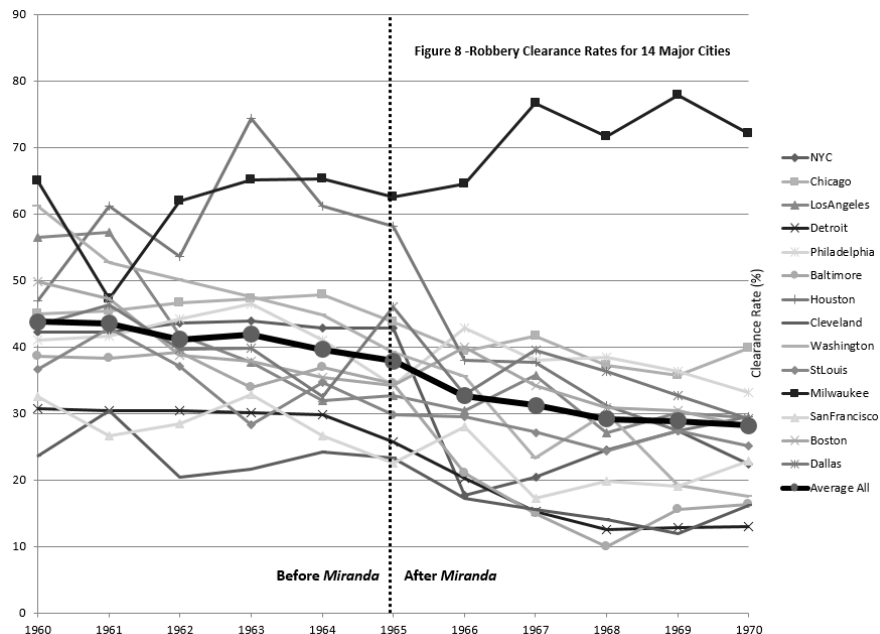
EXPERIMENTERS: DESIGN, INNOVATION, AND DISCOVERY 558-59, 568-76 (2d ed. 2005). See generally HOLGER KANTZ & THOMAS SCHREIBER, *NONLINEAR TIME SERIES ANALYSIS* 174-96 (2003). The issue of the appropriate level of aggregation is obviously not confined to the *Miranda* context, but is a broader issue in criminal justice research. See, e.g., Aneja, Donohue & Zhang, *supra* note 134, at 596-97 (analyzing both county-level and state-level data because of problems with individual counties); John R. Hipp, *Block, Tract, and Levels of Aggregation: Neighborhood Structure and Crime and Disorder as a Case in Point*, 72 AM. SOC. REV. 659, 660 (2007). Related to these problems is what has been called "The Law of Small Numbers," the belief that small samples mirror the population from which they are drawn. See David A. Hyman, *Why Did Law Professors Misunderestimate the Lawsuits Against PPACA?*, 2014 U. ILL. L. REV. 805, 830.

²⁹⁷ See, e.g., David Seidman & Michael Couzens, *Getting the Crime Rate Down: Political Pressure and Crime Reporting*, 8 LAW & SOC'Y REV. 457, 480 (1974) (discussing "[m]anipulation of crime statistics" in Baltimore, Maryland).

²⁹⁸ See, e.g., Hilary Sigman, *Environmental Liability and Redevelopment of Old Industrial Land*, 53 J.L. & ECON. 289, 303 (2010). We are aware of more complex and thorough approaches for addressing issues of noise in time series data. See, e.g., Grega Repovš, *Dealing with Noise in EEG Recording and Data Analysis*, 15 INFORMATICA MEDICA SLOVENICA 18, 19 (2010) (discussing methods for dealing with noise in medical research); Michail Vlachos, Dimitrios Gunopulos & Gautam Das, *Indexing Time-Series Under Conditions of Noise*, in 57 DATA MINING IN TIME SERIES DATABASES 67, 68 (Mark Last, Abraham Kandel & Horst Bunke eds., 2004). However, the limited number of data points in the series we are working with precludes using such methods.

²⁹⁹ See Feeney, *supra* note 8, at 33-34 (discussing ways to create a data set larger than individual cities and moving in the direction of "national" data).

We took this aggregating approach with Feeney's own fourteen-city data set, averaging the reported clearance rates for the fourteen cities.³⁰⁰ The results are depicted in Figure 8 below, which shows the robbery clearance rates for each of the fourteen cities, as well as the average of the fourteen cities and the FBI's national average. As anticipated, data from the fourteen individual cities involve a lot of "noise," reflected by the fluctuating trend lines plotting year-to-year data from the various cities. But when averaged together, the data from the fourteen cities show a clear downward trend over 1966 to 1968.



But rather than just give our own subjective opinion as to whether the average looks like a sharp downward trend (as we believe) or "random shifting"³⁰¹ showing only a "mixed trend" (as Feeney believes), we decided to take a more rigorous approach to the question. A standard statistical technique for reviewing a data set for possible changes over time is to ask whether the data contains a structural break.³⁰² Reviewing data for a structural break is a pure time series

³⁰⁰ We used an unweighted average—i.e., simply the numerical average of each of the fourteen cities. This approach is appropriate because our concern was to determine not the magnitude of any drop in clearance rates in these cities, but rather whether a drop occurred in these cities. We also generated four missing observations for Chicago (1960 to 1963), by assuming that clearance rates in those years were the same as those in 1964, and one missing observation for Dallas (1969), by averaging the clearance rates for the preceding and following year.

³⁰¹ Feeney, *supra* note 8, at 35.

³⁰² See, e.g., Patricia H. Born & J. Bradley Karl, *The Effect of Tort Reform on Medical*

question about a single data series. No choices need to be made about model specification or the inclusion/exclusion of additional variables. Moreover, standard statistical software is available to perform such examinations. Using the standard structural change function (*strucchange*³⁰³) in *R*, we reviewed the fourteen-city average from 1960 to 1970.³⁰⁴ Remarkably, where Feeney saw only “random shifting,” we found a statistically significant structural break following 1965 (with a confidence interval of one year on either side)—consistent with our hypothesis that *Miranda* caused a break in clearance rates over the 1966-to-1968 timeframe.

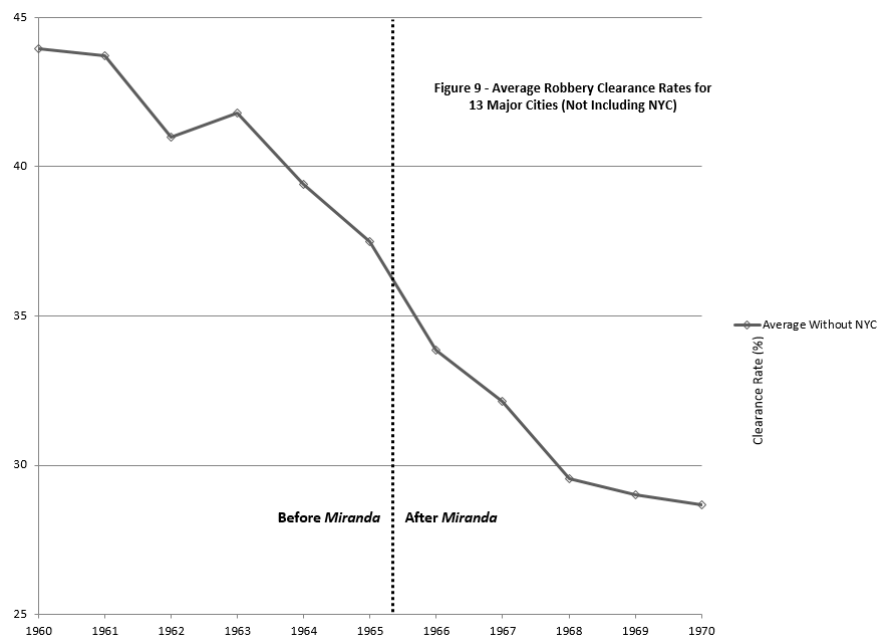
Feeney might respond, however, by arguing that the big drop in clearances in New York City from 1965 to 1966 lies behind our finding of a structural break in the data. Feeney suggests as much when he notes that New York City’s numbers influence our other clearance rate discussions.³⁰⁵ But, here again, it is possible to test this hypothesis by simply excluding New York City from the fourteen-city average. Simple visual observation suggests that dropping New York City from the data set does not make much of a difference, as shown in Figure 9.

Malpractice Insurance Market Trends, 13 J. EMPIRICAL LEGAL STUD. 718, 747 (2016) (performing structural break analysis on an insurance market).

³⁰³ See Achim Zeileis et al., *Strucchange: An R Package for Testing for Structural Change in Linear Regression Models*, 7 J. STAT. SOFTWARE 1, 15 (2002).

³⁰⁴ One of the choices we had to make was what minimum number of observations was required for a structural break. We assumed three observations.

³⁰⁵ See Feeney, *supra* note 8, at 32-33.

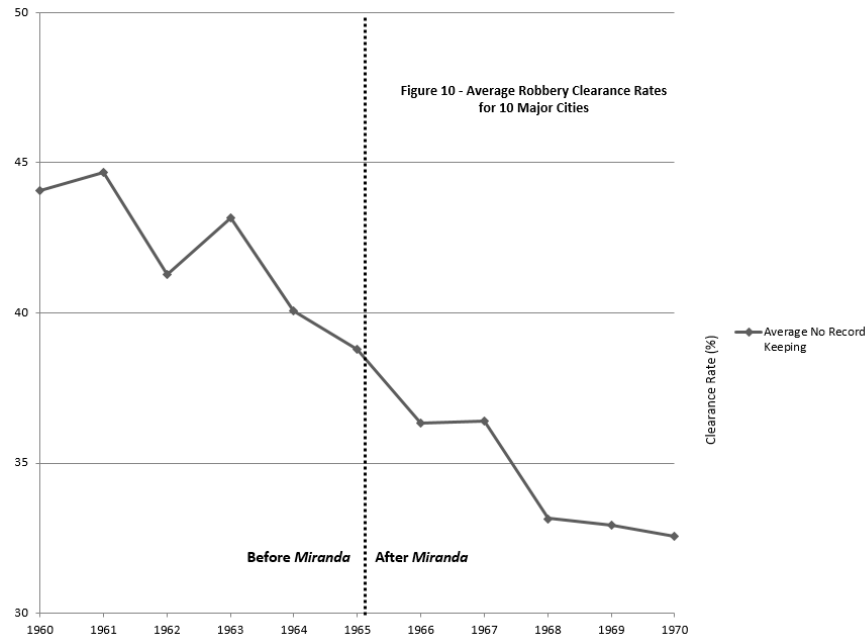


But we can do more than simple visual observation by again using the *strucchange* function. Reviewing the thirteen-city average (the large cities without New York City), we once again detect a structural break in the data, this time at 1966 (with confidence intervals of one year on either side)—a timeframe that fits our 1966-to-1968 hypothesis.³⁰⁶

Feeney might respond, however, that even among just the thirteen cities, more record-keeping problems still existed. In particular, Feeney identified three cities (in addition to New York City) where he believes record-keeping changes coincidentally occurred, potentially affecting clearance rates at the same time as *Miranda*: Detroit, Baltimore, and Washington, D.C.³⁰⁷ So, once again, we can test this possibility by dropping all of the cities with identified record-keeping changes from the original fourteen-city data set, leaving behind ten cities. When examined visually, this data set also shows a downward trend at the time of *Miranda*, as shown in Figure 10.

³⁰⁶ We also detected a second break in the data at 1963.

³⁰⁷ See Feeney, *supra* note 8, at 35 (“The four cities with record keeping shifts (New York, Detroit, Baltimore, and Washington, D.C.) show sharp downward figures . . . [H]owever, this is due to the record keeping shifts rather than to any real sharp decline in clearance rates.”).



Using the *strucchange* algorithm, we are again able to identify a downward structural break in the data in 1967, a time consistent with our theory,³⁰⁸ although this break does not show a confidence band associated with it. We hypothesize that if we had more observations, to the left and right (that is, earlier and later), we would be able to shrink the confidence band. But significant pieces of the fourteen-city data are unpublished or not otherwise generally available. Thus, it would require an extraordinary amount of time to collect data for this extended data set.

In sum, relying only on Feeney's hand-plucked robbery clearance rate data from the nation's fourteen largest cities, we are able to disprove his claim that it shows no evidence of declining clearance rates at the time of *Miranda*. Instead, when the data are averaged together to eliminate noise—with or without individual cities with record-keeping changes—they reveal a structural decline in crime clearance rates in the immediate post-*Miranda* period (i.e., 1966 to 1968).

³⁰⁸ One of the ten cities that Feeney believes does not have record-keeping problems is Los Angeles. Accordingly, Los Angeles is included in the ten cities depicted in Figure 10. *See id.* at 38. As we show shortly, however, the Los Angeles clearance rate data are subject to wild fluctuations at the time of *Miranda*—fluctuations that tend to obscure the post-*Miranda* decline in the remaining nine cities. *See infra* notes 343-65 and accompanying text. Because dropping Los Angeles from the average would only further steepen the immediate post-*Miranda* clearance rate decline in the average depicted in Figure 10, we did not undertake a separate analysis of the data without Los Angeles.

2. Clearance Rate Declines in the Nation's Cities Organized by Population

Feeney's claim that record-keeping changes in New York City and a few other large cities explain the crime clearance rate declines can be explored in another way. After pointing to problems with the New York City data, Feeney notes that "in theory" it would be possible to remove New York City (and other problematic large cities) from the calculation, producing a "cleaner data set."³⁰⁹ Feeney believes that the logistics of such data collections make the project quite difficult.³¹⁰ But actually, collecting cleaner data sets is relatively straightforward. Indeed, the FBI has already constructed data sets where record-keeping issues are unlikely to be a serious problem.

The FBI annually reports not only data for all cities (the data set we generally rely upon³¹¹) but also numerous other subgroupings (e.g., Group I—cities with populations of more than 250,000; Group II—cities with populations between 100,000 and 250,000; Group III—cities with populations between 50,000 and 100,000).³¹² Of course, looking to the grouping of smaller cities would eliminate the effect of record-keeping changes in large cities like New York City. Some of these groupings aggregate as many as several hundred cities whose reporting practices would not have all changed simultaneously in 1966 when the *Miranda* decision was handed down.

Moreover, while the exact number of cities reporting data within each group may fluctuate slightly each year, the fluctuations are insignificant in aggregated data. We plot the number of cities reporting crime data to the FBI in Figure 11.³¹³ As can be seen, there are no sudden spikes or changes in the data.

³⁰⁹ See Feeney, *supra* note 8, at 33.

³¹⁰ See *id.* at 33-34.

³¹¹ See *supra* notes 145-47 and accompanying text.

³¹² See, e.g., UCR-1968, *supra* note 79, at 110-11 tbl.22.

³¹³ In Figure 11, a missing 1957 data point was obtained by averaging the data from 1956 and 1958.



We agree with James Alan Fox (one of the country’s leading crime observers) that, “[a]lthough the group of cities included in the FBI tabulations does change annually, the extent of error resulting from these fluctuations is minimal relative to the aggregate data.”³¹⁴ Also, analysis of the national data does not show any major fluctuations, specifically in the 1965-to-1969 timeframe of particular interest here.³¹⁵ In short, so long as there are a large number of cities in the national group reporting data,³¹⁶ we would not expect record-keeping problems to dictate results (conversely, if there were a very small number of cities in any particular grouping, we would worry about “noise” in the data which might create anomalous results).

Focusing on clearance rates for robbery (the same category that Feeney focuses on), we collected the FBI robbery crime clearance rate data from the eleven different population groupings for which the FBI reported data from 1950 to 2012.³¹⁷ We then ran our standard multiple regression equations on each of the eleven groupings, with the same explanatory variables used earlier.³¹⁸

³¹⁴ FOX, *supra* note 79, at 127 n.11.

³¹⁵ See MICHAEL D. MALTZ, ANALYSIS OF MISSINGNESS IN UCR CRIME DATA 13-14 (2006).

³¹⁶ The situation might be different if one were researching state-level data or, particularly, county-level data. See *id.* at 14-15; Michael D. Maltz & Joseph Targonski, *A Note on the Use of County-Level UCR Data*, 18 J. QUANTITATIVE CRIMINOLOGY 297, 316-17 (2002).

³¹⁷ For some groupings, the FBI did not begin reporting data until several years after 1950. We note those more limited data sets in our chart below.

³¹⁸ In doing so, we were running regression equations that contained a dependent variable (clearance rates) for cities grouped by particular size and that contained independent variables resting on national data. Of course, we would have preferred to use independent variables reporting data for precisely the same city grouping. But it did not appear possible to assemble such data for all our variables, at least without extraordinary effort, so we simply used our

Because of the possibility that particularly groupings of cities might have been able to implement *Miranda* more quickly (or been forced to implement it more slowly), we ran equations for both an immediate *MIRANDA* effect and the three-year phase in of the *MIRANDA* effect we generally use throughout this Article. Table 11 reports our results:

**Table 11. City Subgroups by Population:
Coefficients of the *MIRANDA* Variable for Robbery Clearances**
(both immediate and three-year *Miranda* phase in)
OLS Regressions on Clearance Rates for Specified City/Agency Groupings
(*t* statistics in parenthesis)

Population Group	Number of Cities/ Agencies Reporting Data (1966)	<i>MIRANDA</i> (immediate effect)	<i>MIRANDA</i> (three-year phase in)
Group I - All cities more than 250,000 population	53	-6.23 (-2.887)**	-6.919 (2.763)**
Group IA - All cities more than 1 million population (data from 1956-2012)	5	-4.48 (-1.413)	-4.516 (-1.230)
Group IB - All cities between 500,000 and 1 million population (data from 1956-2012) ³¹⁹	22	-13.4 (-6.189)***	-14.960 (-5.870)***
Group IC - All cities between 250,000 and 500,000 population (data from 1956-2012)	26	-4.38 (-2.061)*	-4.328 (-1.744)†
Group II - All cities between 100,000 and 250,000 population	98	-3.85 (-1.935)†	-4.267 (-1.856)†
Group III - All cities between 50,000 and 100,000 population	225	-3.685 (-2.129)*	-3.243 (-1.595)
Group IV - All cities between 25,000 and 50,000 population	429	-4.835 (-2.581)*	-4.842 (-2.206)*
Group V - All cities between 10,000 and 25,000 population	819	-4.65 (-2.459)*	-5.390 (-2.472)*
Group VI - All cities with less than 10,000 population	1,233	-8.69 (-3.758)***	-10.190 (-3.842)***
Suburban Areas (data from 1961-2012)	1,465	-9.32 (-4.43)***	-10.440 (-3.377)**
Rural Areas (data from 1961-2012)	623	-16.8 (-4.447)***	-19.260 (-3.942)***

*** significant at .001 level ** significant at .01 level * significant at .05 level
† significant at .10 level

existing data. We do not believe this influenced our general results, as it seems very likely that trends in the national data on such things as police officers and unemployment rates generally corresponded to trends in the particular city groups. So long as the trends corresponded, we would be able to reach general conclusions of the type we discuss here.

³¹⁹ For some initial data sets in the 500,000 to 1 million range, we took an average (weighted by population) of two subcategories reported by the FBI.

As can be seen in Table 11, for the immediate *MIRANDA* effect, we found statistically significant *MIRANDA* effects across all population groupings³²⁰—with the exception of Group IA, the nation’s largest cities (i.e., New York City, Los Angeles, and a few others). For the three-year phase in, we found statistically significant *MIRANDA* effects (at the 90% confidence level or higher) for all population groupings with the exception of Group IA and III (although Group III is close to statistical significance).

On closer inspection of the groups, it turns out that Group IA contains just a tiny number of cities. For instance, in the year of *Miranda* (1966), Group IA comprised just five cities. And, as Feeney himself points out, around the time of *Miranda*, there was some fluctuation in data reporting in the nation’s largest cities. For example, Group IA apparently excludes Los Angeles in 1965 but includes Los Angeles in 1966, while excluding New York City from 1966 to 1972.³²¹

With this point in mind, the finding that robbery clearance rates from Group IA do not show a *MIRANDA* effect is easily explainable by changes in the composition of the reporting cities. For example, the inclusion or exclusion of just one extra city in the population group would mean a 20% increase ($6 \div 5$) in the number of cities reporting.³²² Additionally, the inclusion or exclusion of a single city could dramatically change the population of the reporting cities in a single year.³²³

On the other hand, the other broad groupings are not so susceptible to random fluctuations attributable to a single jurisdiction or a small group of jurisdictions. For example, Group VI (cities with populations of less than 10,000) comprises more than a thousand cities.³²⁴ The average clearance rates of those cities are unlikely to be subject to short-term changes in the data. We find *MIRANDA* effects in every single FBI population grouping where there are enough cities to avoid such random fluctuations—i.e., every FBI grouping for cities and agencies below the one million population level, extending through suburban and rural agencies—with the only exception being the “near miss” of Group III in the three-year *Miranda* phase in (an anomalous result that we believe does not undercut the general picture).

To be sure, in theory, it would be desirable to assemble a consistent set of a large number of cities to examine their clearance rates and see whether any of

³²⁰ To be clear, Group II was statistically significant only at the .10 level.

³²¹ See Feeney, *supra* note 8, at 30-33.

³²² From 1968 to 1969, the number of cities in Group IA changed by 20%, from five cities to six cities. Compare UCR-1968, *supra* note 79, at 100 tbl.12, with UCR-1969, *supra* note 79, at 94 tbl.9.

³²³ From 1965 to 1966, the population of the cities in Group IA changed substantially, from 16,149,000 to 11,230,000, a more than 30% change in a single year. Compare UCR-1965, *supra* note 79, at 97 tbl.8, with UCR-1966, *supra* note 79, at 100 tbl.12.

³²⁴ See, e.g., UCR-1966, *supra* note 79, at 101 tbl.12 (reporting 1233 cities in the Group VI category).

our conclusions change. But given the almost uniformly consistent findings from the ten population groupings the FBI currently reports, we think that further effort in this area would not change our conclusions. It is important to remember a point (not discussed by Feeney) that the FBI itself emphasized in its crime reports in the two years immediately following *Miranda*. In summing up the 1966 data, the FBI noted that the drop in clearances was “universally reported by all population groups.”³²⁵ And in the following year, 1967, the FBI continued to report widespread bad news.³²⁶ Again a clearance rate drop was “universally reported by all population groups.”³²⁷ Record-keeping changes in a few isolated cities, such as those Feeney identified, cannot explain this pattern.

B. *California Clearance Rate Data*

Feeney also points to data from California to claim that *Miranda* had no harmful effect on the clearance rates. Feeney repeatedly asserts that in the 1960s “California was . . . widely regarded as having the nation’s best crime statistics,”³²⁸ although he provides no source for this assertion. He then reports that California clearance rate data show a steady decline in the 1960s, but “nothing very dramatic.”³²⁹

Because Feeney provides no source for the claim that California had the “premier” state crime data,³³⁰ it is difficult to assess his position. Perhaps his views are colored by the fact (not disclosed in his article) that he served on the Research Advisory Council for California’s crime statistics and thus helped oversee the collection of the data whose quality he finds high.³³¹ But, in any event, the pertinent issue here is not the overall quality of California’s crime data, but rather the quality of one particular series: the clearance rate series.

One thing that caught our eye in reviewing Feeney’s presentation of the California clearance rate data is that he used data running only from 1954 to 1969.³³² Since the period we are interested in is 1966 to 1968, that gives only one year of post-*Miranda* data (1969). It would obviously be better to run the data out to 1970, 1975, or beyond, to look at long-term trends. Indeed, confirmation of that fact comes from Feeney’s immediately previous table of individual city clearance data (discussed in the preceding Section), which appears just two pages earlier in his article, reporting city clearance rate data

³²⁵ UCR-1968, *supra* note 79, at 27.

³²⁶ See UCR-1967, *supra* note 79, at 30 (“Whereas police nationally cleared 24.3 percent of these offenses in 1966, this dropped to 22.4 percent in 1967. The decrease was noted in every Crime Index offense with auto theft solutions having the sharpest decline . . .”).

³²⁷ *Id.* at 30.

³²⁸ Feeney, *supra* note 8, at 38.

³²⁹ *Id.*

³³⁰ *Id.*

³³¹ See DEP’T OF JUSTICE, BUREAU OF CRIMINAL STATISTICS & SPECIAL SERVS., CRIME AND DELINQUENCY IN CALIFORNIA, 1980-1989, at ii (listing advisory board members).

³³² See Feeney, *supra* note 8, at 39 tbl.7.

from 1960 to 1970.³³³ Why did Feeney fail to run the California data similarly out to (at least) 1970?

On close inspection of the annual publications from the California Bureau of Justice Statistics (*Crime and Delinquency in California*),³³⁴ an answer to that question appears: California stopped reporting clearance rate data entirely in 1970. *Crime and Delinquency in California—1969* contains clearance rate data for the seven index crimes (just as every previous publication back to 1954 had).³³⁵ *Crime and Delinquency in California—1970* does not contain any clearance rate data.³³⁶ Indeed, California did not report any clearance rate data until 1985, at which point they made available data collected back to 1980.³³⁷

For someone claiming that this California clearance rate data are the best data on clearance rate changes in the 1960s,³³⁸ it is odd that Feeney does not disclose the fact (which must have been apparent to him³³⁹) that the California Bureau of Criminal Statistics determined, in 1970, that the data set should not be reported at all. Of course, the natural inference is that in 1970, the Bureau of Criminal Statistics decided that there was some problem with the data series (unreliability?), which meant that it was not worthy of reporting. And, of course, if the 1970-to-1979 data was unreliable or otherwise unworthy of reporting, that raises the inference that the same problems would likely have existed just a few years earlier, including the critical 1966-to-1968 period.

But even assuming that the California clearance rate data are reliable, what are we to make of Feeney's assertion that it shows only a steady decline in the 1960s, but "nothing very dramatic" and certainly no "sharp fall."³⁴⁰ The wiggly words "nothing very dramatic" begin to arouse some suspicion, particularly when it becomes clear that there were, in fact, significant crime clearance rate changes in California when 1965 is compared to 1968, as shown in Table 12.

³³³ *Id.* at 37 tbl.6.

³³⁴ From 1952 to 1964, the annual publication of California crime statistics was entitled *Crime in California*.

³³⁵ See DEP'T OF JUSTICE, BUREAU OF CRIMINAL STATISTICS, CRIME AND DELINQUENCY IN CALIFORNIA 1969, at 55 tbl.II-3 (reporting statewide clearance rates for 1969).

³³⁶ See DEP'T OF JUSTICE, BUREAU OF CRIMINAL STATISTICS, CRIME AND DELINQUENCY IN CALIFORNIA 1970 (lacking clearance rates throughout entire report, including in the table of contents).

³³⁷ See CAL. BUREAU OF CRIMINAL STATISTICS, CRIME AND DELINQUENCY IN CALIFORNIA 1985, at 24 (1985).

³³⁸ See Feeney, *supra* note 8, at 38 ("Without question, it was the premier state criminal justice statistical agency in the nation.").

³³⁹ Presumably Feeney attempted to collect California clearance rate data for 1970 to make his California series consistent with the fourteen-city series he discusses just a few pages earlier. Also, Feeney was on the Research Advisory Council when the decision was made to resume releasing clearance rate data. See *supra* note 331 and accompanying text.

³⁴⁰ See Feeney, *supra* note 8, at 36-38.

**Table 12. California Clearance Rate Changes—1965-1968
Seven Index Crimes**

	Homicide	Rape	Robbery	Assault	Burglary	Theft	Vehicle
1965 Clearance Rate	84.2%	56.1%	33.7%	67.3%	21.7%	19.1%	23.8%
1968 Clearance Rate	77.2%	49.8%	28.3%	63.0%	18.8%	16.9%	18.1%
Percent Reduction 1965-1968	-8.3%	-11.2%	-16.0%	-6.4%	-13.4%	-11.5%	-23.9%

Sources: CRIME IN CALIFORNIA—1965; CRIME AND DELINQUENCY IN CALIFORNIA—1968

The consistent downward movement of California's clearance rates immediately after *Miranda* would appear to be consistent with our hypothesis of *Miranda*'s harms. But Feeney seems to argue that even if California's clearance rates moved downward during that time, there was no "sharp fall" in the clearance rates. Of course, what may seem to a particular observer to be—or not to be—a "sharp fall" is a matter of judgment. As discussed in the previous Section,³⁴¹ however, statistical techniques exist for examining data to determine whether there has been a structural break in the series. Applying that same technique—the *strucchange* algorithm from *R*—we decided to look at the California robbery clearance rate data from 1960 to 1969.³⁴² We detected a structural change, occurring in 1963 with a 95% confidence interval extending from 1962 to 1965. The 1963 date does not by itself fit our *Miranda* theory, although the confidence band (1962 to 1965) is broad enough to accept our theory.

However, we wanted to look more carefully at the California clearance rate data to determine whether it was reliable. Our initial assumption was that, because California was a large state with many different police agencies, the data would be generally internally consistent through the 1960s. But as we investigated California crime statistics during that time period more carefully, we learned that a single county—Los Angeles County—was responsible for a huge percentage of the reported felonies in the state.³⁴³ Looking at the 1965

³⁴¹ See *supra* notes 302-04 and accompanying text.

³⁴² California did not report crime clearance rate data from 1970 to 1984. See *supra* notes 334-37. We selected 1960 as the beginning for our series because we wanted to compare the Los Angeles data discussed by Feeney, and the data he reported for that Los Angeles data set began in 1960.

³⁴³ See, e.g., *State Crime: More than Half of It in L.A. County*, L.A. TIMES, Mar. 12, 1965,

statistics for robbery, the crime of most interest to Feeney and to us, well over half—63.7% (6496)— of the California robbery arrests (10,200) came from Los Angeles County.³⁴⁴ That suggests that if there were changes in reporting criteria for clearance rates in that one county, it would have had a very significant effect on California's statewide data. It also raises some concern about the comparability of California data to the rest of the country because Los Angeles County in 1966 had *the* highest crime rate in the nation, according to the FBI.³⁴⁵

The argument could be made, however, that Los Angeles County is not, in fact, a single jurisdiction for crime reporting purposes, but rather comprised of multiple agencies (the police departments in Los Angeles, Long Beach, Pasadena, Alhambra, etc.). This is true. However, among the various agencies in Los Angeles County, a single city—Los Angeles—is far and away the largest. In 1965, of the robbery arrests made in Los Angeles County, more than half (4115) were made in Los Angeles.³⁴⁶ This means that in 1965, 40.3% of all California robbery arrests were made in just this single city.

The fact that so much of the data in California came from one jurisdiction would be of even greater concern if there were any reason for thinking the Los Angeles data are problematic. Unfortunately, reasons for concern exist. Continuing our focus on robbery clearance rates, it is first concerning that, according to Feeney, Los Angeles data are not included in the FBI's 1965 UCR, but are included in the 1966 UCR.³⁴⁷ This suggests perhaps that Los Angeles had difficulty gathering its data for 1965.³⁴⁸ Moving to the next few years, and looking at the annual reports from Los Angeles (the *Statistical Digests*), one finds reason for concern about the accuracy of the robbery clearance rate data precisely in the 1965-to-1968 period in which we are most interested. Specifically, the total number of cleared robberies in Los Angeles fluctuated wildly during that period:

at A1 ("Los Angeles County contributed more than half of 346,255 felonies reported in California during 1964 . . .).

³⁴⁴ DEP'T OF JUSTICE, BUREAU OF CRIMINAL STATISTICS, CRIME & DELINQUENCY IN CALIFORNIA 1965, at 221 app. 3 [hereinafter CRIME & DELINQUENCY IN CALIFORNIA 1965].

³⁴⁵ See Eric Malnic, *County Had Highest Crime Rate in U.S. in 1966, FBI Says*, L.A. TIMES, Aug. 11, 1967, at 3.

³⁴⁶ CRIME & DELINQUENCY IN CALIFORNIA 1965, *supra* note 344, at 221 app. 3.

³⁴⁷ See Feeney, *supra* note 8, at 30-31.

³⁴⁸ This hypothesis is supported by the fact that in the Claremont McKenna library, a depository for the LAPD's *Statistical Digest*, the 1965 volume was not received until March 13, 1967—far later than the typical appearance of middle of the following year. For example, the 1965 volume was received on May 23, 1965.

Year	Number of Cleared Robberies in L.A. ³⁴⁹
1965	2630
1966	2411
1967	3563
1968	3069

These data show a dramatic one-year increase from 1966 to 1967 of 47%—a total of 1152 additional clearances.³⁵⁰ To be sure, crime was increasing during this period of time. But the one-year increase in crime during that year (8%³⁵¹) is not anywhere close to a 47% increase. Robbery is not the only crime category for which the 1967 data appears anomalous. For example, the number of burglary clearances in Los Angeles jumped from 8327 in 1966 to 13,726 in 1967—a 64% increase in a single year.³⁵² These startling increases suggest that something changed in Los Angeles in 1967, either in its approach to policing or in its collection of data.

One possibility is that a change in leadership in the Los Angeles Police Department (“LAPD”) during the critical time period produced a change in clearance rates. As shown in the chart below, William Parker’s sixteen-year run as LAPD Chief of Police ended with his death just a few weeks after *Miranda*. The LAPD then had three new chiefs of police over the next three years.

³⁴⁹ County of Los Angeles, DEP’T OF SHERIFF, STATISTICAL DIGEST 1965, at 11 [hereinafter L.A. STATISTICAL DIGEST 1965] (providing data from robbery clearance reports); County of Los Angeles, DEP’T OF SHERIFF, STATISTICAL DIGEST 1966, at 8 [hereinafter L.A. STATISTICAL DIGEST 1966] (same); County of Los Angeles, DEP’T OF SHERIFF, STATISTICAL DIGEST 1967, at 8 [hereinafter L.A. STATISTICAL DIGEST 1967] (same); County of Los Angeles, DEP’T OF SHERIFF, STATISTICAL DIGEST 1968, at 8 [hereinafter L.A. STATISTICAL DIGEST 1968] (same).

³⁵⁰ The numbers in the text are absolute numbers. The same dramatic fluctuations are shown in clearance rate changes, from 32.8% in 1965, to 30.4% in 1966, to 35.8% in 1967, and then 27.1% in 1968. See L.A. STATISTICAL DIGEST 1965, *supra* note 349, at 11; L.A. STATISTICAL DIGEST 1966, *supra* note 349, at 8; L.A. STATISTICAL DIGEST 1967, *supra* note 349, at 8; L.A. STATISTICAL DIGEST 1968, *supra* note 349, at 8.

³⁵¹ Compare L.A. STATISTICAL DIGEST 1966, *supra* note 349, at 6 (reporting total index crimes for 1966 of 174,583), with L.A. STATISTICAL DIGEST 1967, *supra* note 349, at 6 (reporting total index crimes for 1967 of 188,717).

³⁵² L.A. STATISTICAL DIGEST 1966, *supra* note 349, at 9; L.A. STATISTICAL DIGEST 1967, *supra* note 349, at 9. The burglary clearance rate for Los Angeles jumped from 14.9% to 22.9%, a 53% increase in a single year.

Table 13. Los Angeles Chiefs of Police—1950-1978

Name of Chief	Initial Date of Service as Chief	Last Date of Service as Chief
William A. Warton	June 30, 1949	August 9, 1950
William H. Parker	August 9, 1950	July 16, 1966
Thad F. Brown	July 18, 1966	February 17, 1967
Thomas Reddin	February 18, 1967	May 5, 1969
Roger E. Murdock	May 6, 1969	August 28, 1969
Edward M. Davis	August 29, 1969	January 16, 1978
Robert F. Rock	January 16, 1978	March 28, 1978
Daryl F. Gates	March 28, 1978	June 27, 1992

Source: *Chiefs of the Los Angeles Police Department*, L.A. POLICE DEP'T, http://www.lapdonline.org/chiefs_of_the_los_angeles_police_department [https://perma.cc/BE77-SQH9] (last visited Feb. 13, 2017).

This instability in LAPD leadership might have produced changes in approaches either to policing or record keeping during the critical time for our study. For example, from February 1967 to May 1969, Chief Thomas Reddin was trying to put a more “human face” on the LAPD.³⁵³ Interestingly, 1967 was also the year that the LAPD returned to the nation’s airwaves courtesy of the program *Dragnet*, which showed Los Angeles police officers as “mild-mannered, by-the-book cops.”³⁵⁴ The year 1967 was also a year in which relations between the LAPD and the media took a downward turn, and when LAPD instituted “sweeping changes” in recruiting and training.³⁵⁵

It is hard to tell how these background changes affected on-the-ground policing in Los Angeles in 1967. We have located an *L.A. Times* article from 1967, which suggests that police methods changed in that year. The article reports that, “Los Angeles police will soon adopt tactical operations in which forces can be instantly poured into areas where crime problems are greatest.”³⁵⁶

³⁵³ David Shaw, *Chief Parker Molded LAPD Image—Then Came the '60s*, L.A. TIMES, May 25, 1992, at A1 (“Chief Reddin, in particular, tried to put a more human face on the department, with billboards of smiling police officers and LAPD sponsorship of Little League baseball teams, youth camping trips and neighborhood kaffeeklatsches.”); see also Paul Houston, *Reddin Stresses Firm, Fast Control of Riots*, L.A. TIMES, Aug. 20, 1967, at EB (noting buildup of community-relations programs and Chief Reddin’s efforts in this area). See generally JOE DOMANICK, TO PROTECT AND TO SERVE: THE LAPD’S CENTURY OF WAR IN THE CITY OF DREAMS 203-08 (1994).

³⁵⁴ See Shaw, *supra* note 353, at A1.

³⁵⁵ See Paul Houston, *Police Dept. Overhauls Recruiting and Training*, L.A. TIMES, Aug. 18, 1967, at A1; Shaw, *supra* note 353, at A1 (describing a critical 1967 article about LAPD as being viewed by police as “a blatant declaration of war”).

³⁵⁶ Gene Blake & Bob Jackson, *Crime War Need: New Concepts, Technology*, L.A. TIMES, Mar. 5, 1967, at E12A. This may have been a precursor to the “hot spot” theory of policing that is currently in vogue. See, e.g., Anthony A. Braga, Andrew V. Papachristos & David M. Hureau, *The Effects of Hot Spots Policing on Crime: An Updated Systematic Review and Meta-Analysis*, 31 JUST. Q. 633, 634 (2014); Jerry H. Ratcliffe et al., *Citizens’ Reactions to*

The Chief of the LAPD, Darryl Gates, notes in his autobiography that in 1967 he was in charge of a newly created unit that focused on robberies.³⁵⁷ Interestingly and perhaps related to these points, we noticed that in the LAPD's *Statistical Abstract*, about half of the 1100 additional clearances in Los Angeles came from the 77th Street Division of the LAPD—an apparent high-crime area. We also noticed that the number of detectives assigned to the 77th Street Division increased significantly that year as well,³⁵⁸ along with a substantial increase in arrests for FBI index crimes.³⁵⁹ This would seem to suggest that the LAPD changed its approach to policing in 1967,³⁶⁰ which could have produced a significant improvement in its robbery clearance rates.

Hot Spots Policing: Impacts on Perceptions of Crime, Disorder, Safety and Police, 11 J. EXPERIMENTAL CRIMINOLOGY 393, 394 (2015); cf. FRANKLIN E. ZIMRING, THE CITY THAT BECAME SAFE: NEW YORK'S LESSONS FOR URBAN CRIME AND ITS CONTROL 142 (2012) (discussing New York City crime decline and "hot spot" policing).

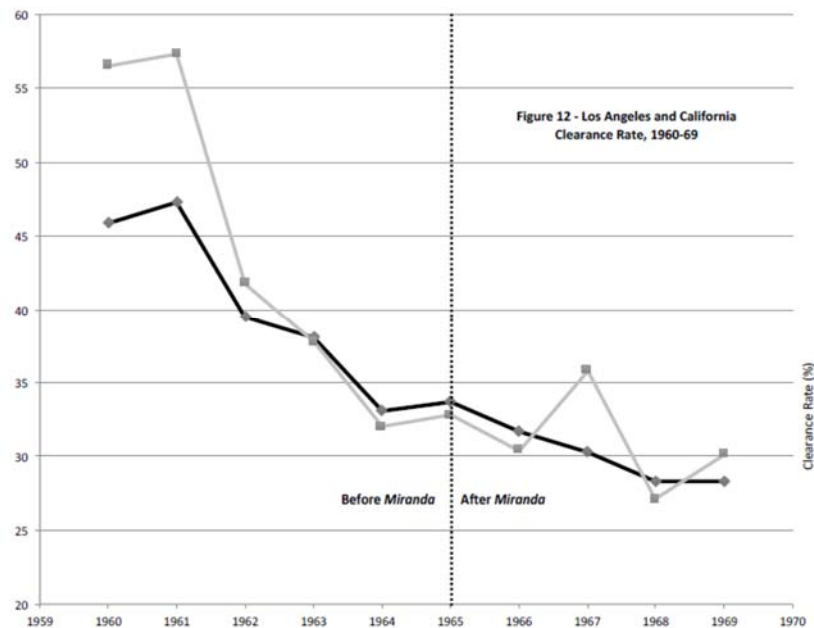
³⁵⁷ DARYL F. GATES WITH DIANE K. SHAH, CHIEF: MY LIFE IN THE LAPD 110-13 (1992) (discussing how Chief Reddin established the new unit).

³⁵⁸ Compare L.A. STATISTICAL DIGEST 1966, *supra* note 349, at 82 (noting that there were eighty-one detectives in the 77th Street Division), with L.A. STATISTICAL DIGEST 1967, *supra* note 349, at 82 (noting that there were eighty-seven detectives in the 77th Street Division).

³⁵⁹ L.A. STATISTICAL DIGEST 1967, *supra* note 349, at 3.

³⁶⁰ See JAMES A. BULTEMA, GUARDIANS OF ANGELS: A HISTORY OF THE LOS ANGELES POLICE DEPARTMENT 229 (2013) (recounting changes made by Chief Reddin).

The 1967 anomaly in the Los Angeles data is sufficiently large to noticeably affect the California clearance rate trend line data for this time, as shown in Figure 12.



Plotting the Los Angeles robbery clearance rate data on a graph over time, there is a small drop in 1966, a sharp spike upward in 1967, and then a drop in 1968. Because Los Angeles data forms such a significant part of the California data, that single spike tends to obscure (i.e., tends to level or smooth out) a downward drop in California crime clearance rates from all other jurisdictions.³⁶¹ While California's robbery clearance rate declines throughout the 1966-to-1968 period, the drop is not a sharp fall (as also shown in Figure 12)—the point on which Feeney seizes.

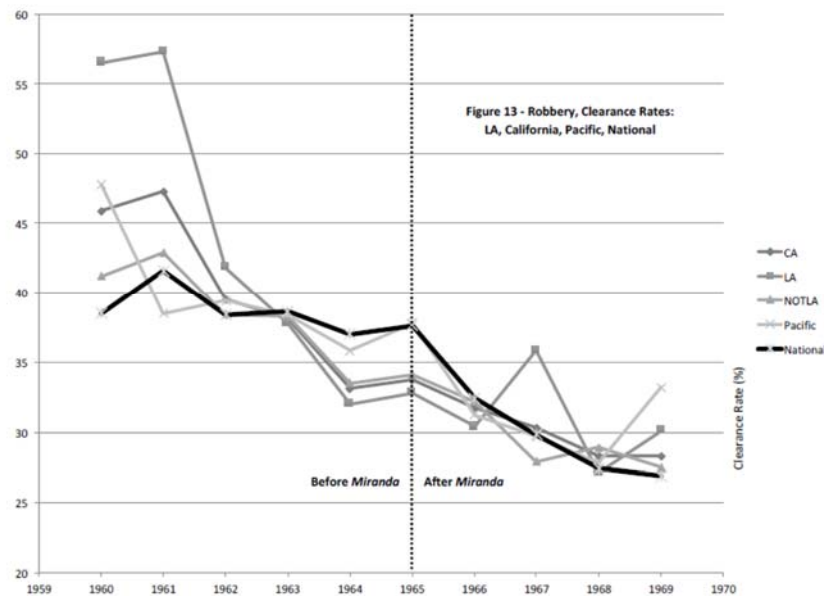
The complication for our purposes is that LAPD's apparent change in police approaches in 1967—and the anomalous one-year upward spike in clearance rates—renders Los Angeles an unsuitable jurisdiction for a simple before-and-after comparison of clearance rates. The change in policing is a confounding variable that makes it impossible to determine what effect *Miranda* alone had on policing. It is, however, possible to eliminate the effect of anomalous Los Angeles data on the California clearance rate data by removing Los Angeles

³⁶¹ Because Los Angeles is one of the nation's ten largest cities, L.A. data form part of the ten-city average we discussed in the previous Section. And because of Los Angeles's anomalous 1967 upward spike in clearance rate, its data tend to obscure the post-*Miranda* clearance rate drop in Figure 10.

from the trend line.³⁶² Figure 13 plots robbery crime clearance rates during the 1960s not only for Los Angeles, but also for all California police agencies apart from Los Angeles, all California agencies (as just discussed), the “Pacific” region of the United States as reported in the FBI’s Uniform Crime Reports,³⁶³ and the national city data that we have relied on throughout this Article. As can be seen—and as would be expected to be the case with progressively larger data sets plotted on a single graph—the one data set that is most subject to fluctuations is, unsurprisingly, the smallest of these groupings: the city of Los Angeles. As the groupings become progressively larger, the trend lines become generally smoother. This suggests that the fluctuating “tree” of Los Angeles is tending to obscure the “forest” of many other jurisdictions.

³⁶² To back out the Los Angeles data from the California data, one only needs to know what percentage of the data come from Los Angeles and what the Los Angeles clearance rate was compared to the California clearance rate. To simplify calculations, we assumed that Los Angeles’s percentage of (adult) arrests from 1965 (the midpoint of the series) fairly reflects its percentage throughout the decade. We were forced to use this estimate because we were unable to easily locate a series that would allow us to calculate Los Angeles’s percentage of the overall California data throughout the decade, as *California Crime and Delinquency* stopped reporting individual city data around 1966. In 1960, Los Angeles City (adult) robbery arrests constituted 42.7% of all (adult) arrests in California for robbery, DEP’T OF JUSTICE, BUREAU OF CRIMINAL STATISTICS, CRIME IN CALIFORNIA 1960, at 49 tbl.III-5, which is not too different from the 40.3% reported in 1965, CRIME & DELINQUENCY IN CALIFORNIA 1965, *supra* note 344, at 221 app. 3, the figure we used for the entire decade. We do not believe that a more precise calculation of the percentage throughout the decade would alter the findings we report.

³⁶³ This includes not just California, but also Oregon, Washington, Alaska, and Hawaii.



So far we have been discussing what is apparent simply from visual observation of the trend lines. But a more rigorous analysis of the trends is possible. In particular, because of the seemingly anomalous fluctuations in the 1967 Los Angeles data, we thought it would be instructive to run the structural break algorithm discussed earlier on California's robbery clearance rate data, but now removing the Los Angeles data. Over the 1960-to-1969 period, the *strucchange* algorithm found two structural breaks in that series: (1) 1963 (with 95% confidence interval break dates between 1962 and 1964); and (2) 1966 (with 95% confidence interval break dates between 1965 and 1967). This second break fits our *Miranda* theory precisely. Put another way, removing from the California data series the fluctuating data from one possibly anomalous jurisdiction (which had multiple police chief changes between 1966 and 1969), the data from all other jurisdictions in California reveal a sharp—i.e., structurally significant—downward drop in robbery crime clearance rates starting somewhere between 1965 and 1967. This is exactly when the drop should have occurred to be consistent with our theory. Thus, far from contradicting our conclusions, if anything, the California robbery clearance rate data support it.

V. WHY CLEARANCE RATES WILL INHERENTLY UNDERESTIMATE *MIRANDA*'S COSTS

The crime clearances rate data we have discussed thus far suggest that *Miranda* did harm law enforcement. It is possible to argue, however, that crime clearance rates are a “poor” way to measure *Miranda*'s effect on law enforcement, as Feeney has also contended in his article—after arguing (as just

discussed) that the clearance rates did not really decline after *Miranda*.³⁶⁴ We agree with Feeney's general point about limits on *Miranda*'s ability to harm police clearance rates. But that does not make clearance rates a "poor" way of measuring *Miranda*'s impact on police, but rather an *understated* way of measuring that impact.³⁶⁵ Put another way, if *Miranda*'s harmful effects can be detected even in nationally aggregated crime clearance rates which would miss many of the harmful effects, then *Miranda*'s actual impact on law enforcement would likely be substantially greater.

In this Part, we develop the reasons for concluding that clearance rate data will understate any harmful effects from *Miranda*. In Section V.A, we develop the ways in which *Miranda* could affect clearance rates. In Section V.B, we review Feeney's studies on police conduct investigations to see what they tell us about *Miranda*'s capacity to affect clearance rates. And in Section V.C, we consider whether *Miranda*'s effects would be detectable only in "secondary" clearance rates, or in primary and other clearance rates as well. In Section V.D, we present reasons for believing that declining clearance rates are a product of declining confession rates. We conclude, in Section V.E, with an explanation of why confessions remain extremely important even in an era of advancing forensic science.

A. *How Miranda Is Relevant to Clearance Rates*

As Feeney points out, *Miranda*'s impact on clearance rates might be somewhat limited. Many crimes will be "cleared" before police interrogate any suspect. Feeney offers as straightforward examples several different bank robber scenarios, such as when a guard walks into a bank during a robbery and makes an arrest; when the police identify a robber with a photo from a camera inside the bank; or when a bank teller sees a picture of the robber in the suspect mug book.³⁶⁶ Those cases will be cleared by the arrest of the suspect before *Miranda* comes into play. In cases such as these, *Miranda* has, in Feeney's words, "very little capacity to impact the ability of the police to identify and apprehend offenders."³⁶⁷

Feeney does not appear to contest that *Miranda* could have an effect on clearance rates, but instead argues that any effect would be quite modest.³⁶⁸ Accordingly, it may be useful to set out initially the three different ways in which

³⁶⁴ See Feeney, *supra* note 8, at 113.

³⁶⁵ On this point, Donohue agrees with us. See Donohue, *supra* note 7, at 1156 ("If *Miranda* significantly stops the flow of damaging statements by criminals to the police, it could well reduce the rate of successful prosecutions of crime even if it has no impact on measured clearance rates.").

³⁶⁶ Feeney, *supra* note 8, at 42.

³⁶⁷ *Id.*

³⁶⁸ *Id.* ("It is certainly possible that giving the *Miranda* warnings has some impact upon the willingness of a suspect to talk with the police and that the decision hampers the police in conducting post-arrest interrogations.").

Miranda could have theoretically harmed law enforcement clearance rates, two of which Feeney discusses and one of which he does not.

The most obvious way in which *Miranda* could harm the police would be by affecting “primary clearances”—that is, by interfering with the ability of police to interrogate suspects for crimes that the police suspect they have committed. As we noted briefly earlier, police might wish to question a suspect about a crime and *Miranda* might interfere with their ability to do so, either by blocking interrogation entirely (because a suspect “lawyers up”) or by making interrogation less effective.³⁶⁹ To be sure, many cases will be cleared by arrest before *Miranda* comes into play. But for cases in which a suspect is questioned in custody but never ultimately formally arrested, *Miranda* could have a harmful effect on the primary clearance rate—that is, a reduction in the ability of police to get information that they need to clear a crime in the first instance.

Miranda might also interfere with so-called “secondary clearances”—that is, situations where police arrest a suspect for one crime and he secondarily confesses to other similar crimes. For example, a robbery suspect caught by police might confess not only to the robbery for which he was caught but also to several others.³⁷⁰ But because secondary clearances occur after an initial arrest, there seems to be little doubt that *Miranda* could harm law enforcement secondary clearance rates, as even Feeney himself concedes.³⁷¹

There remains a third type of clearance not specifically discussed by Feeney, a form that we will label “more-serious-crime” clearances. Consider, for example, a drug dealer arrested for a traffic offense or a small drug deal. Before *Miranda*, the drug dealer might have been interrogated and confessed to a more serious crime—a robbery or homicide perhaps. But after *Miranda*, this drug dealer “lawyers up” and thus avoids police questioning.³⁷² As a result, the police never clear that more serious crime.

This kind of clearance has been discussed in the literature in connection with so-called “broken windows” policing. The theory behind broken windows policing is that disorder (i.e., things like broken windows in a neighborhood)

³⁶⁹ See *supra* notes 80-86 and accompanying text.

³⁷⁰ JOHN E. CONKLIN, ROBBERY AND THE CRIMINAL JUSTICE SYSTEM 147 (1972); see also *infra* Section V.C.2.

³⁷¹ See Feeney, *supra* note 8, at 65 (noting eighteen percent of robbery clearances in Boston studied by Conklin were secondary clearances, “clearly sufficient to cover a drop of the magnitude claimed by Professors Cassell and Fowles”).

³⁷² Once a suspect invokes his *Miranda* right to an attorney, *Miranda* blocks not only questioning about the offense for which he was initially being questioned, but any other offense as well. See *Minnick v. Mississippi*, 498 U.S. 146, 150 (1990) (holding that the “Fifth Amendment protection of *Edwards* is not terminated or suspended by consultation with counsel”); *Arizona v. Roberson*, 486 U.S. 675, 678-79 (1988) (holding that, once a suspect invokes right to counsel, a suspect cannot be interrogated for any offense); *Edwards v. Arizona*, 451 U.S. 477, 482 (1981) (finding that after request for counsel police questioning had to cease).

and crime are inextricably linked.³⁷³ If police focus on order maintenance policing, then crime levels will ultimately drop.³⁷⁴ Studies dispute whether such order maintenance policing actually reduces crime rates and, if so, how it reduces crime rates.³⁷⁵ But for present purposes, it is informative to focus on one way in which order maintenance policing might operate to shed light on how *Miranda* could harm clearance rates.

One mechanism by which order maintenance policing is said to work is that increased arrests of petty offenders give police more opportunities to interrogate offenders.³⁷⁶ This kind of clearance has been discussed in the clearance rate literature.³⁷⁷ For example, in one case, the NYPD solved numerous interwoven homicides based on one misdemeanor arrest, when a vehicle stop led to a misdemeanor arrest and subsequent interviews of the passengers.³⁷⁸ Of course, if *Miranda* makes such post-arrest interviews more difficult to conduct, then it will have a depressing effect on clearance rates.

This more-serious-crime clearance possibility was recently raised by Graham Ousey and Matthew Lee in their multivariate regression analysis of declining homicide clearance rates from 1980 to 2000 across several hundred cities.³⁷⁹ They found a link between increased drug dealing arrests and improved homicide clearance rates.³⁸⁰ As an explanation, they offered the possibility of the more-serious-crime clearance, specifically:

[The] war on drugs policies of the 1980s and 1990s may have resulted in “sweeps” that cast wide nets that snagged many offenders. Even if the vast majority of those arrested in drug sweeps were nonviolent drug offenders,

³⁷³ See James Q. Wilson & George L. Kelling, *Broken Windows: The Police and Neighborhood Safety*, ATLANTIC MONTHLY, Mar. 1982, at 29, 30-31.

³⁷⁴ GEORGE L. KELLING & CATHERINE M. COLES, *FIXING BROKEN WINDOWS: RESTORING ORDER AND REDUCING CRIME IN OUR COMMUNITIES* 14 (1996).

³⁷⁵ Compare GEORGE L. KELLING & WILLIAM H. SOUSA, JR., MANHATTAN INST. CTR. FOR CIVIC INNOVATION, CIVIC REP. NO. 22, *DO POLICE MATTER?: AN ANALYSIS OF THE IMPACT OF NEW YORK CITY’S POLICE REFORMS* 18 (2001), with BERNARD E. HARCOURT, *ILLUSION OF ORDER: THE FALSE PROMISE OF BROKEN WINDOWS POLICING* 4-6 (2001).

³⁷⁶ See Jang, Hoover & Lawton, *supra* note 153, at 531 (describing a study by Jack Maple and Chris Mitchell in 1999 that found that “increased arrests of petty offenders provide police more opportunity to interview offenders”); see also JACK MAPLE WITH CHRIS MITCHELL, *THE CRIME FIGHTER: HOW YOU CAN MAKE YOUR COMMUNITY CRIME-FREE* 156-57 (1999) (listing objectives for interrogations of minor offenders, including “statements about any other crimes the suspect might admit” and concluding that broken windows policing was a significant contributor to crime reduction in New York City).

³⁷⁷ See Lockwood, *supra* note 160, at 750.

³⁷⁸ Jang, Hoover & Lawton, *supra* note 153, at 531-32.

³⁷⁹ See Ousey & Lee, *supra* note 85, at 141 (“Against the backdrop of the precipitous decline in urban homicide clearance over the past several decades, this study examines factors that may be linked to within-city, over-time variation in homicide clearance rates from 1980 to 2000.”).

³⁸⁰ *Id.* (“[D]rug market arrests are associated with higher clearance rates.”).

a small segment may have been “persons of interest” in open homicide cases who previously had managed to avoid detection by the police. Thus, a by-product of aggressive drug law enforcement may have been that police were able to detain and ultimately arrest (i.e., clear) wanted perpetrators of murder. Related to the above possibility, aggressive drug enforcement may have increased avenues of acquiring information on existing unsolved homicide cases. In essence, perpetrators of drug offenses who were caught in drug sweeps may have been questioned regarding open murder cases, with reduced charges offered as an incentive for “rolling over” on known homicide perpetrators.³⁸¹

Ousey and Lee’s suggestion of a linkage between drug arrests and homicide clearances, detectable even in the aggregate data they were reviewing, suggest the real possibility of important more-serious-crime clearances. But the evidence on this point is conflicting. For example, a study by Hyunseok Jang and his colleagues investigated what effect broken windows law enforcement had on clearance rates. They found inconsistent results across different crime categories, with broken windows enforcement having a positive impact on clearance rates for burglaries, a marginal impact on auto theft clearances, and a negative relationship with larceny clearances.³⁸² On the other hand, Brian Lockwood’s more recent article on burglary clearances in Philadelphia found empirical support for the theory.³⁸³

A similar argument can be made with regard to *Miranda*’s indirect effects on stop-question-and-frisk (“SQF”) tactics that police employ. An expansion of broken windows policing,³⁸⁴ SQF involves police aggressively stopping and questioning suspected criminals, and in some cases frisking them in an effort to fight crime.³⁸⁵ Developing empirical research appears to support the proposition that concentrated police tactics in concentrated areas can be effective in fighting

³⁸¹ Ousey & Lee, *supra* note 85, at 153.

³⁸² Jang, Hoover & Lawton, *supra* note 153, at 534-35.

³⁸³ Lockwood, *supra* note 160, at 757. Some further indirect support for the theory is found in the “field interrogation” studies and related literature. *Infra* note 415.

³⁸⁴ See Tracey L. Meares, *The Law and Social Science of Stop and Frisk*, 10 ANN. REV. L. & SOC. SCI. 335, 337 (2014) (describing SQF as a deepening and expansion of order maintenance policing).

³⁸⁵ James Q. Wilson & Barbara Boland, *The Effect of the Police on Crime*, 12 LAW & SOC’Y REV. 367, 370 (1978).

crime,³⁸⁶ although the research on SQF tactics in particular is mixed.³⁸⁷ We have not focused on such tactics extensively here, because *Miranda* does not directly harm police SQF efforts, since a suspect who is merely “stopped” is not entitled to the *Miranda* warnings-and-waiver procedures.³⁸⁸ But *Miranda* may indirectly harm such crime fighting efforts to the extent that suspects arrested through stop-and-frisk operations may invoke their rights and prevent subsequent questioning about other offenses.

We need not definitively determine here who has the better of the argument on the underlying debate over the effectiveness of broken window policing or stop and frisk tactics. Our limited purpose in describing how *Miranda* might have influenced more-serious-crime clearances, along with primary clearances and secondary clearances, is only to suggest that such a linkage is possible—a possibility we then explore through our regression equations. Given these three ways in which *Miranda* might affect clearance rates, our project of looking for possible effects from *Miranda* is a reasonable one.

One additional point is worth making. Some scholars have speculated that *Miranda* might actually increase the number of confessions that suspects give by providing false assurances to suspects.³⁸⁹ Our methodology allows for this possibility, since it is not uniquely tied to a reduction in clearance rates; clearance rates could have increased after *Miranda*. However, we saw no evidence that *Miranda* was useful in obtaining additional clearances.

B. *Empirical Studies on Miranda’s Capacity to Change Clearance Rates*

Given the three possible ways in which *Miranda* could have depressed crime clearance rates, we were surprised at the extent to which Feeney attempted to

³⁸⁶ CHRISTOPHER S. KOPER & EVAN MAYO-WILSON, POLICE STRATEGIES TO REDUCE ILLEGAL POSSESSION AND CARRYING OF FIREARMS: EFFECTS ON GUN CRIME 8, 14-28 (2012) (reviewing literature on proactive investigation and enforcement, described as “intensified traffic enforcement and field interrogations of suspicious persons,” and finding that they reduced gun crimes); Lawrence W. Sherman, James W. Shaw & Dennis P. Rogan, *The Kansas City Gun Experiment*, in NAT’L INST. OF JUST., RESEARCH IN BRIEF 1 (1995), <http://www.ncjrs.gov/pdffiles/kang.pdf> [<https://perma.cc/G7LP-SMPA>] (discussing results from an experiment in Kansas City involving an increased number of traffic citations, car checks, pedestrian checks, and arrests, which produced a drop in gun crimes); Robert J. Sampson & Jacqueline Cohen, *Deterrent Effects of the Police on Crime: A Replication and Theoretical Extension*, 22 LAW & SOC’Y REV. 163, 163 (1988) (finding strong effects of proactive policing, particularly on robbery crime rates).

³⁸⁷ Compare Dennis C. Smith & Robert Purtell, Does Stop and Frisk Stop Crime? (Nov. 6, 2008) (unpublished manuscript) (on file with author) (finding statistically significant negative effects of stops on robbery, burglary, motor vehicle theft, and homicide, but not on other crimes), with Richard Rosenfeld & Robert Fornango, *The Impact of Police Stops on Precinct Robbery and Burglary Rates in New York City, 2003-2010*, 31 JUST. Q. 96, 98, 103-04 (2014) (finding, “contrary to prior research,” few effects of SQF on robbery and burglary).

³⁸⁸ *Berkemer v. McCarty*, 468 U.S. 420, 442 (1984).

³⁸⁹ See Duke, *supra* note 14, at 558-60.

make the case that *Miranda* could have had “very little capacity” to depress clearance rates³⁹⁰ and that “[o]nly if police interrogation plays an important role in identifying and arresting suspects . . . is it possible that the *Miranda* decision has the effects” we find in our regression equations.³⁹¹ In support of his argument, Feeney marshals a series of studies of police investigatory techniques. But while these studies support the conclusion that *Miranda* could have had only a limited—i.e., understated—effect on police clearance rates, they hardly support Feeney’s claim that *Miranda* effects would have been undetectable in clearance rates.

Feeney presents two types of studies in support of his argument: a pre-*Miranda* study and several post-*Miranda* studies. We analyze these two groups differently because they have different imports.

1. A Pre-*Miranda* Study on Police Investigations

Perhaps the most important study cited by Feeney is a detailed analysis of cases investigated by the LAPD in January 1966 (just a few months before *Miranda*) conducted by the Science and Technology Task Force of the President’s Crime Commission on Law Enforcement and the Administration of Justice.³⁹² This study is important because it is the only pre-*Miranda* study cited by Feeney, and thus it provides a unique glimpse into what the police world looked like before the *Miranda* rules came into play.

This President’s Crime Commission study analyzed 1905 reported crimes in two field divisions of the LAPD.³⁹³ Feeney believes that this study provides a “good general picture of how the police apprehended offenders in the period immediately prior to *Miranda*,”³⁹⁴ citing it to support his argument that interrogation did not play an important role in identifying and arresting suspects.³⁹⁵ But Feeney never explains how his position can square with the study’s own explicit finding: that the “interrogation of arrestees” was among the principle methods used by detectives to identify suspects.³⁹⁶ Indeed, the study presents a table on police methods used to link unnamed suspects to crimes in which interrogation is the single most successful method.³⁹⁷

Rather than discuss this overall conclusion from the study’s own authors, Feeney constructs his own subset of data from the study. Lumping his analysis

³⁹⁰ Feeney, *supra* note 8, at 42.

³⁹¹ *Id.* at 43.

³⁹² *See id.* (citing Herbert H. Isaacs, *A Study of Communications, Crimes, and Arrests in a Metropolitan Police Department*, in INST. FOR DEF. ANALYSES, TASK FORCE REPORT: SCIENCE AND TECHNOLOGY—A REPORT TO THE PRESIDENT’S COMMISSION ON LAW ENFORCEMENT AND ADMINISTRATION OF JUSTICE 88 (1967)).

³⁹³ *Id.*

³⁹⁴ *Id.*

³⁹⁵ *Id.* at 48.

³⁹⁶ Isaacs, *supra* note 392, at 8.

³⁹⁷ *Id.* at 98 tbl.B-18.

of the study into a section devoted to “how the police catch burglars,”³⁹⁸ Feeney extracts from the study’s 1905 total crimes a subset of 626 burglary cases.³⁹⁹ Feeney then derives his own clearance rate for burglaries (based on another table) and concludes that “interrogation is credited with a burglary clearance all by itself in only 4% of the burglary clearances.”⁴⁰⁰

But in the process of jerry-rigging his own statistics, Feeney has made basic arithmetic errors. Properly calculated, the study actually shows (using Feeney’s method of calculation) that interrogation was credited with producing a clearance all by itself for 11.1% of the burglary clearances.⁴⁰¹ And when we include additional clearances where interrogation was involved “in combination” with other police investigative methods, the percentage of the burglary clearances in which interrogations was a factor rises to 26.4%.⁴⁰²

In addition, Feeney chose to focus solely on the study’s data on burglary. But burglary was not one of the individual crime categories where we have a consistent *MIRANDA* effect.⁴⁰³ Instead, robbery is the individual crime where we find the most consistent *MIRANDA* effects. And the study suggests that interrogation was involved in 25.4% of all robbery clearances (and 7.8% of all robbery cases).⁴⁰⁴

Still further, the study appears to have entirely excluded secondary clearances; the study followed cases to an arrest, not to a clearance.⁴⁰⁵ Accordingly, if a robbery suspect was arrested and later confessed to several other robberies, the study would not have necessarily captured those clearances. As a consequence, the study’s clearance rate numbers are artificially depressed, particularly given the fact that the study looked at cases cleared over one month

³⁹⁸ Feeney, *supra* note 8, at 48.

³⁹⁹ *Id.*

⁴⁰⁰ *Id.*

⁴⁰¹ See Isaacs, *supra* note 392, at 98 tbl.B-19 (finding that interrogation was the “unique method” of clearance in eight cases which, divided by the seventy-two burglary clearances (626 burglary cases x 11.5% clearance rate) equals 11.1%).

⁴⁰² See *id.* (finding that interrogation was the “unique method” or “in combination” method of clearance in nineteen cases, which divided by the seventy-two burglary clearances (626 burglary cases x 11.5% clearance rate) equals 26.4%).

⁴⁰³ See *supra* notes 203-07 and accompanying text.

⁴⁰⁴ Unlike for burglary, the study does not report a specific clearance rate for robbery. Because the study was done in Los Angeles in 1966, however, we can estimate the clearance rate for the robbery in the study by using the LAPD’s robbery clearance rate for 1966 which is 30.4%. See L.A. STATISTICAL DIGEST 1966, *supra* note 349, at 8. The study reports 102 robbery cases, which multiplied by the 30.4% clearance rate implies approximately thirty-one cleared robberies. The study reports that two robbery cases were uniquely solved by interrogation and six cases by interrogation in combination with other methods.

⁴⁰⁵ See Isaacs, *supra* note 392, at 90 (“Where no arrest was made, no case was actually counted as cleared . . . even though there may have been some other method of clearance.”); see also *id.* at 95 tbl.B-11 (defining “other clearances” so that they appear to primarily involve prosecutor decisions not to charge).

in two particular field divisions,⁴⁰⁶ and thus would automatically exclude clearances in other time periods or originating from other areas.

Good reasons exist for believing that even these figures significantly understate interrogation's role in clearing crimes. The study could easily collect standard information about robberies that was normally reported to the FBI—e.g., the study's apparatus was triggered when a robbery was reported to the police and then the clearance status (cleared or not cleared) would have been collected in the ordinary course of business. But collecting information about whether interrogation occurred in a particular case was trickier business. To gather that statistic, the study examined the “followup” reports filed by detectives.⁴⁰⁷ Of course, if a detective for any reason failed to file follow-up paperwork—or to memorialize questioning in that paperwork—then the study would not have detected any role of interrogation.

In addition, the study reported information on interrogation only where it was involved in linking to a crime a suspect who had not been named in the initial police report.⁴⁰⁸ If for any reason a suspect's name appeared in the initial report, then the study did not collect information about the methods police used to solve that crime—including interrogation.⁴⁰⁹ And because the focus was on police successes (i.e., cleared crimes) and not on police failures, the study collected no data on police interrogations in cases involving uncleared crimes, which were about three quarters of the total crimes in the study.⁴¹⁰

In assessing all these numbers, it is important to remember that we do not purport to offer an explanation for the trajectory of, for example, all robbery cases, but only a fraction of them. Our best estimate of the harmful effect of the *Miranda* variable on robbery clearances is 7.1%,⁴¹¹ a number that can coexist quite comfortably with the numbers recounted above about the role of interrogations in clearances.

2. Post-*Miranda* Studies on Police Investigations

We have spent considerable time analyzing the President's Crime Commission study because it appears to be the only pre-*Miranda* study that Feeney discusses. With regard to several post-*Miranda* studies that, in Feeney's view, show a limited role for interrogation, one simple point to be made is that the data from these studies likely supports our argument, rather than detracts from it. We believe that in the post-*Miranda* world, clearance rates are depressed precisely because of *Miranda*. A finding that interrogation does not solve many crimes after *Miranda* is consistent with that argument. Put another way, as a theoretical matter, even if the post-*Miranda* clearances attributable to

⁴⁰⁶ *Id.* at 88.

⁴⁰⁷ *Id.* at 89.

⁴⁰⁸ *Id.* at 98 tbl.B-18.

⁴⁰⁹ *See id.* at 98 (discussing methods used in “unnamed suspect cases”).

⁴¹⁰ *See id.* at 97 tbl.B-15 (comparing 1423 uncleared cases with 482 cleared cases).

⁴¹¹ *See supra* note 268 and accompanying text.

interrogation are 0, that hardly disproves our position that, in the absence of *Miranda*, they would be, for example, 7.1 percentage points higher in the case of robbery or 1.0 percentage point higher in the case of larceny.⁴¹²

Feeney nonetheless seems to believe that these post-*Miranda* police studies demonstrate empirically that *Miranda* could not have had the kinds of effects on clearance rates that we ascribe to the decision.⁴¹³ But Feeney relies on a certain kind of study, specifically studies on how to manage police investigations. These studies do not focus mainly on police interrogations and, accordingly, rarely discuss police interrogations—much less *Miranda*'s possible depressing effect on clearance rates. A much more direct effort to assess *Miranda*'s effects is found in the studies that asked police officers for their assessment of *Miranda*'s impact. We canvass the relevant studies below, reporting the findings that police officers who had experience operating both with and without *Miranda* consistently believed that *Miranda* was harming their investigative efforts, including, in particular, clearance rates.⁴¹⁴ Feeney does not explain why he ignores this research.⁴¹⁵

But even if we confine ourselves to Feeney's selected post-*Miranda* investigative management studies, these studies fail to prove Feeney's claim that *Miranda* has little capacity to effect police clearance rates. Feeney discusses studies involving three kinds of crimes: robbery, burglary, and larceny.⁴¹⁶ We will look at these three areas separately to show the problems with his approach.

a. *Robbery Studies*

Turning to robbery, Feeney relies on studies that are designed to answer not the question of how significant is police interrogation in solving crimes, but

⁴¹² See *supra* note 268 and accompanying text.

⁴¹³ See Feeney, *supra* note 8, at 36 (arguing that post-*Miranda* clearance rate trends could be described as a "mixed trend with a downward slide," but not a "sharp fall").

⁴¹⁴ See *infra* notes 531-44 and accompanying text.

⁴¹⁵ Feeney spends only one sentence in his article on this point, obliquely noting, without clarification, that "surveys of detective opinion sometimes place greater value on police interrogations as a method of solving crimes." Feeney, *supra* note 8, at 47 n.121.

Feeney also does not review studies on "field interrogation" and related police tactics, which tend to provide support for the importance of interrogations to effective law enforcement. See, e.g., JOHN E. BOYDSTUN, SAN DIEGO FIELD INTERROGATION: FINAL REPORT 27 (1975) (presenting a controlled experiment finding that suspensions of field interrogations was associated with a significant increase in the frequency of crimes); Sampson & Cohen, *supra* note 386, at 185 (favoring "the interpretation that proactive policing directly reduces crime rates"); Gordon P. Whitaker et al., *Aggressive Policing and the Deterrence of Crime*, 7 LAW & POL'Y 395, 407 (1985) (finding support for field interrogations deterring crime). See generally Wilson & Boland, *supra* note 385, at 367 (discussing ways in which aggressive policing might reduce crime rates); Rushin & Edwards, *supra* note 127 (manuscript at 40) (finding that externally imposed regulation of police, through consent decrees, "may, at least initially, make officers less aggressive or less effective in combatting crime").

⁴¹⁶ See Feeney, *supra* note 8, at 48, 52, 57.

rather the question of how to manage police investigations. Thus, the studies often look at issues regarding how to assign police manpower in optimal ways, such as among patrol and detective units.⁴¹⁷ As Feeney is forced to concede, these studies do not typically directly analyze the question of how cases are solved.⁴¹⁸

Because these studies were not designed to focus on questions relating to police interrogation, Feeney has to jerry-rig his own statistics by selectively extracting numbers from the reported data addressing other subjects. Feeney's most extended discussion of robbery clearance is his presentation of data from a 1969 Oakland, California study, which (according to Feeney) shows that only 2% of robbery clearances (2 cases out of 83) came from interrogating suspects.⁴¹⁹ Feeney presents this figure in a table in his article, but describes the numbers as being "[a]dopted from" a study done by William Smith.⁴²⁰ But Smith's study did not purport to even address the number of cases in which interrogation of a suspect was involved in a clearance. To derive his 2% figure, Feeney appears to have scanned through the write-ups of some examples given by Smith in various categories. And, finding only two examples that directly mention interrogation, Feeney then infers that only 2% of the entire body of cases involved interrogations.

As a method for calculating how often interrogation clears crime, this approach is badly flawed. Obviously, looking at only a limited number of written-up examples does not provide a comprehensive assessment of the total universe of the cases. Given that only approximately one-third of the cases had detailed write-ups,⁴²¹ we might reasonably assume that the two examples Feeney found might more realistically be just one-third of the total interrogation cases,

⁴¹⁷ See, e.g., GREENWOOD, *supra* note 220. While we discuss the quantitative aspects of these studies below, it is interesting to find qualitative suggestions in the studies that police interrogation is a significant factor in clearance rates. See, e.g., *id.* at 17 (discussing burglary cases and noting that "[t]he large majority of cases cleared that meet the FBI definition [of a clearance through an arrest for stolen property] rely on the suspect's admission of guilt").

⁴¹⁸ See, e.g., Feeney, *supra* note 8, at 49 n.130 (discussing the Greenwood study in the preceding footnote and concluding "[t]he study did not analyze how cases were solved"); see also *id.* at 50 (discussing Bernard Greenberg and his colleagues' model for predicting which cases police could most easily clear); *id.* at 55-56 (discussing Greenberg and his colleagues' "predictive model" for robbery clearances). Greenberg and his colleagues developed this model in two studies published in the 1970s. See BERNARD GREENBERG ET AL., FELONY INVESTIGATION DECISION MODEL: AN ANALYSIS OF INVESTIGATIVE ELEMENTS OF INFORMATION (1977) [hereinafter GREENBERG ET AL., FELONY INVESTIGATION]; BERNARD GREENBERG ET AL., ENHANCEMENT OF THE INVESTIGATIVE FUNCTION: ANALYSIS AND CONCLUSIONS (1972) [hereinafter GREENBERG ET AL., ENHANCEMENT].

⁴¹⁹ Feeney, *supra* note 8, at 53 (discussing William Smith, *How Cops Catch Robbers*, in 4 THE PREVENTION AND CONTROL OF ROBBERY 39 (Floyd Feeney & Adrienne Weir eds., 1973)).

⁴²⁰ *Id.* at 54 tbl.11.

⁴²¹ See Feeney, *supra* note 8, at 50-74 (writing up approximately twenty-six examples).

suggesting that rather than a 2% clearance rate due to interrogation reported by Feeney, the actual rate would have been about 6%.

But an even more serious problem develops on close scrutiny of Feeney's method for "adopting" the figures from Smith's study. Feeney notes that the study initially involved 106 robbery clearances, but his 2% figure involves only 83 cases.⁴²² What happened to the missing 23 cases?

It is not easy to determine how Feeney boiled down Smith's 106 clearances to just 83 cases,⁴²³ but one thing that is clear is that Feeney artificially excluded a significant number of Smith's cases that involved interrogations and confessions. Smith notes that one of the ways in which robbery cases are cleared is that a robber is apprehended at the scene and then "is questioned about [other similar robberies]."⁴²⁴ Smith calls these clearances "secondary clearances" and identified thirteen such secondary clearances in the sample (along with an additional seven cases charged to the arrested suspects, but not cleared within the period).⁴²⁵ Smith's later discussion of these secondary clearances makes clear that at least some of these involved confessions. Indeed, a later table in the study explains that, of the thirteen secondary clearances, four cases involved a cab robbery for which the basis for the clearance was "the suspect confessed," and, in another case involving a laundromat robbery, the suspect "confessed to [a] street holdup two weeks earlier."⁴²⁶ This means that Feeney excluded at least five clear cases of interrogations clearing crimes by crafting his smaller sample. Smith also notes that there were two cases in which "the robber did identify himself as responsible for a number of robberies," including one case in which the arrestee "identified himself as responsible for 40 pursesnatches, but the detective was able to identify . . . six of the instances."⁴²⁷ Here again, given that Feeney had only two clearances in his entire sample, he didn't count (for example) these extra robbery clearances.

If we start to add in all of these cases that Feeney dropped for unexplained reasons, it becomes clear that interrogation is a significant feature of the way in which some robbery cases are cleared. And it is important to remember that all of these data are post-*Miranda*, where it might be expected that police would encounter obstacles to clearing crimes—precisely the obstacles that we are

⁴²² Compare *id.* at 53 n.148 (describing the study as involving 106 clearances), with *id.* at 54 tbl.11 (reporting statistics involving a total of 83 clearances).

⁴²³ We have reviewed the Smith chapter several times and cannot find any obvious way to narrow down the 106 total clearances Feeney references to 83 clearances. One nonobvious way is to look only at cases where victims and witnesses played the decisive role identifying a suspect. See Smith, *supra* note 419, at 50 (referring the victim and witness playing the decisive role in 36 of the 48 unshared roles and 47 of the shared roles; 36 + 47 = 83). But if this is how Feeney constructed his subset, then he specifically excluded all cases in which police investigation played a decisive role in the clearance.

⁴²⁴ Smith, *supra* note 419, at 43.

⁴²⁵ *Id.* at 46 tbl.4.

⁴²⁶ *Id.* at 80 tbl.11.

⁴²⁷ *Id.* at 79.

trying to assess in this Article. Indeed, the Smith study reported that robbery suspects were often unwilling to talk to investigators,⁴²⁸ presumably after receipt of *Miranda* warnings.

Among the remaining studies Feeney cites on robbery, only one of them follows police actions through the investigative process and collects data on how police collect crime-related information.⁴²⁹ That study—a four-city study conducted by John Eck—actually suggests that questioning of suspects is important to the investigative process. Eck noted that “[s]uccessfully investigating crimes is, in large part, reliant on the collection and interpretation of information that may identify a suspect.”⁴³⁰ Accordingly, Eck collected information about how police agencies gathered information. Eck provided a table showing the probability of obtaining related crime information through various actions of robbery investigators, which identified “suspect interview” as a highly productive approach for obtaining information by robbery investigators.⁴³¹ Indeed, “suspect interview” was *the* most productive approach in DeKalb County, one of the four areas studied.⁴³² This seems to directly support our conclusion that interrogation of suspects could be an important tool in robbery investigations.

b. *Larceny Studies*

With regard to larceny investigations, Feeney argues that most larceny crimes are solved not by interrogations, but by “apprehension in the act of theft, apprehension in the possession of stolen property, or identification of a suspect by the victim.”⁴³³ We can stipulate that these are the main ways in which larcenies are solved, as we do not purport to offer a theory addressing most larceny clearances. Rather, our theory is that *Miranda* has caused larceny clearance rates to drop about 2 percentage points—for example, that in 2012, larceny clearance rates would have been about 24% without *Miranda* rather than

⁴²⁸ *Id.* at 78-79.

⁴²⁹ See JOHN E. ECK, SOLVING CRIMES: THE INVESTIGATION OF BURGLARY AND ROBBERY 244-45 (1983) (distinguishing his study from earlier studies because those studies “did not collect data on what detectives did after the preliminary investigation had been conducted”). The Eck study was also published in the same year by the Police Executive Research Forum. Following Feeney, we cite here the National Institute of Justice version.

⁴³⁰ *Id.* at 165.

⁴³¹ *Id.* at 196 tbl.6-14 (listing “Probability of Obtaining Related Crime Information Given That Activities are Conducted by Investigators of Robberies (% of Case-Days)” and listing for “Suspect Interview” percentages for both patrol officer conduct and detective conduct).

⁴³² In DeKalb County, “suspect interview” produced related crime information 51.5% of the time, compared to “discussion with detective” (32.7%), and “informant interview” (26.7%), among other approaches. *Id.*

⁴³³ Feeney, *supra* note 8, at 58.

22% with it.⁴³⁴ Thus, the question is whether *Miranda*'s rules hamper clearances for about 2% of total larcenies.⁴³⁵

Feeney writes that "[i]f Professors Cassell and Fowles are serious about their claim that *Miranda* resulted in a sizable loss of larceny clearances, they might begin by showing that the police actually interrogated a significant proportion of the 1966-68 larceny arrestees."⁴³⁶ As Feeney presumably knows, no empirical studies exist on the precise number of larceny suspects questioned during those three years. Indeed, there is very little data from the fifty years since *Miranda* on the frequency of police questioning. But what little data do exist suggest that a significant percentage of larceny arrestees are in fact questioned. As discussed earlier,⁴³⁷ Cassell, joined by Hayman, studied cases presented by law enforcement to the Salt Lake County Attorney's Office for prosecution in 1994. For the property crimes in the study,⁴³⁸ 79.7% of suspects were in fact questioned,⁴³⁹ giving significant room for *Miranda* to operate in the percentage of cases we are trying to explain.

To try and prove that police do not often question larceny suspects, Feeney discusses the crime of shoplifting. He notes that shoplifting is generally reported to the police only when store detectives have apprehended a shoplifter—thus, police do very little, yet the clearance rate for shop lifting is extraordinarily high (80% to 90% or higher).⁴⁴⁰ But shoplifting (with its high clearance rate) is clearly a small part of the FBI's larceny crime category. According to the FBI, in 2010, shopliftings were only 17.2% of larceny theft offenses, with the other important categories being theft from motor vehicles (26.4%), theft from buildings (11.3%), theft of motor vehicle accessories (8.9%), and a catchall of "others" (31.8%).⁴⁴¹ Shoplifting and its high clearance rates is an anomaly among all larceny offenses.

Finally, Feeney appears to betray his ignorance about how regression equations operate when he writes that if we "are serious" about our claim that *Miranda* resulted in a sizeable loss of larceny clearances, we "need also to deal

⁴³⁴ See *supra* note 193 and accompanying text.

⁴³⁵ As noted earlier, even a two-percentage-point delta in larceny clearance rate means that, without *Miranda*, larceny clearances would have been 9.4% higher and about 500,000 additional larcenies would have been cleared in recent years. See *supra* Table 5.

⁴³⁶ Feeney, *supra* note 8, at 58-59 (footnote omitted).

⁴³⁷ See *supra* notes 59-61 and accompanying text (discussing Cassell and Hayman's study).

⁴³⁸ Most of the cases reviewed (58.4%) involved property crimes (i.e., theft, burglary, larceny/forgery, and auto theft). Cassell & Hayman, *supra* note 58, at 853 tbl.1.

⁴³⁹ *Id.* at 870 tbl.5, 853 tbl.1 (deriving the percentage figure by taking the number of property cases in which suspects were questioned and dividing by the number of property cases). About two-thirds of the questioning in the study was custodial questioning. *Id.* at 883 tbl.6.

⁴⁴⁰ See Feeney, *supra* note 8, at 57-58.

⁴⁴¹ UCR-2010, *supra* note 79, at 26 (displaying a chart of "Larceny-Theft Distribution, 2010").

with the problem of statistical error. [The] ‘sharp fall’ for larceny is barely perceptible even in the FBI figures. Although [Cassell and Fowles] find statistical significance in the drop, the statistical effect that they find is not particularly strong.”⁴⁴² Feeney seems to be confused here, because the “barely perceptible” drop in larceny clearance rates to which he refers is a drop that ultimately is explained with high confidence by our *Miranda* equations—both in their current iteration and in our earlier article’s version.⁴⁴³ Our finding is, indeed, “particularly strong”—statistically significant at conventional levels, and not fragile as confirmed by Bayesian model averaging.

c. *Burglary Studies*

A final type of crime that Feeney believes could not have been affected by *Miranda* is burglary.⁴⁴⁴ Burglary was a crime for which we found statistically significant *MIRANDA* effects in some of our regression equations but not others.⁴⁴⁵ Perhaps burglary is simply a crime for which interrogation plays a less important role in solving cases than for other crimes, which is why our *MIRANDA* effect is not as robust.

But even for the crime of burglary, Feeney’s data fail to demonstrate that *Miranda* lacks any capacity to affect clearances—at least to the degree required to be consistent with our findings. Our models suggest that *Miranda* might have an effect on burglary clearances of about two percent.⁴⁴⁶ We can thus readily accede to Feeney’s point that the most important way in which burglary suspects are identified and apprehended is through on-the-scene information, such as initial identifications by burglary victims or witnesses.⁴⁴⁷ We are trying to explain change not in these quickly solved “slam dunk” burglary cases, but the more difficult-to-solve cases where follow-up investigation is required.

As with the robbery studies discussed earlier, most of Feeney’s cited burglary studies focus on the initial identification of suspects rather than on follow-up

⁴⁴² Feeney, *supra* note 8, at 59.

⁴⁴³ See *supra* notes 236-37 and accompanying text; *supra* Table 4 (showing that *Miranda*’s effect on larceny clearance rates is statistically significant at conventional 95% confidence level); *supra* Table 7 (showing that 60.9% of all equations have a larceny effect, including 80% of the top five equations, for data 1950-2012; *supra* Table 8 (showing that 99.1% of all equations have a larceny effect, including 100% of the top five equations, for data 1950-2007, before the recession occurred).

⁴⁴⁴ Feeney, *supra* note 8, at 48.

⁴⁴⁵ See *supra* note 204 and accompanying text; *supra* Table 6 (*MIRANDA* effect found for 1950-2007 data but not 1950-2012 data in Cassell/Fowles model); *supra* Table 6 (*MIRANDA* effect found (at ninety percent confidence) in 1950-2012 data in Donohue model, but not 1950-2012 data); *supra* Table 7 (Bayesian model average shows *MIRANDA* effect only in 42.9% of equations); see also Cassell & Fowles, *supra* note 5, at 1088 tbl.3 (statistically significant effect found for burglary).

⁴⁴⁶ See *supra* Table 6.

⁴⁴⁷ See Feeney, *supra* note 8, at 48-52.

investigation.⁴⁴⁸ The one study that tries to follow burglary cases throughout the investigative process is the Eck study, which (as with robbery) found the suspect interviews were important (although slightly less important than in the robbery cases).⁴⁴⁹ A table showed that “suspect interview” was important in obtaining related crime information for burglary.⁴⁵⁰ Eck’s data supports our thesis that police interrogation can be an important method of obtaining information used to clear burglaries—and that *Miranda*, by restricting that method, could have caused a noticeable reduction in burglary clearances.

C. *Miranda’s Harmful Effects on Primary and Secondary Clearances*

For all the reasons just explained, we believe Feeney is incorrect in his assertion that *Miranda* did not have the “capacity” to cause clearance rate changes of the type and magnitude we found in our regression equations. And it appears that Feeney is, perhaps, not entirely convinced by his argument either. Immediately after arguing at length against *Miranda*’s capacity to reduce crime clearance rates, Feeney next advances the argument that any reduction in clearance rates would have been confined to “secondary” rather than “primary” clearances.⁴⁵¹ Feeney appears to concede that *Miranda* could depress secondary clearance rates.⁴⁵² Indeed, Feeney specifically suggests that changes in secondary clearances could have explained the drops in the clearance rates that we observed.⁴⁵³ Other scholars have advanced similar theories in the past, including Kamisar.⁴⁵⁴

Feeney first argues that the lost clearances that our regression equations identify are probably all secondary clearances.⁴⁵⁵ He then further argues that lost secondary clearances “would have had little real effect on law enforcement—because solving older crimes typically contributes little to the fight against crime.”⁴⁵⁶ Serious problems exist with both prongs of his argument.

⁴⁴⁸ See *supra* notes 417-21.

⁴⁴⁹ See ECK, *supra* note 429, at 192 (discussing results of study as to importance of suspect interviews for burglary suspect information).

⁴⁵⁰ *Id.* at 191 tbl.6-11.

⁴⁵¹ Feeney, *supra* note 8, at 42-43 (“[*Miranda*] may have affected what the British call ‘secondary clearances’ . . . [b]ut it has had little to do with ‘primary clearances’ . . .”).

⁴⁵² Cf. *id.* at 42 (conceding that *Miranda* may have affected secondary clearances).

⁴⁵³ See *id.* at 65 (“Professors Cassell and Fowles point to no empirical studies indicating that the number of secondary clearances was too small to account for the ‘sharp fall’ in clearance rates that they claim.”).

⁴⁵⁴ See Cassell & Fowles, *supra* note 5, at 1122 & nn.325-26 (discussing Kamisar’s study and citing to additional supporting sources).

⁴⁵⁵ See Feeney, *supra* note 8, at 60 (“One response to the Cassell-Fowles claims of a ‘sharp’ post-*Miranda* fall in clearance rates has been to attribute the decline to a drop in the number of [secondary clearances].”).

⁴⁵⁶ *Id.*

1. Lost Clearances as Lost Primary Clearances

Turning first to the question of whether the lost clearances were primary or secondary, it is useful to begin by getting some sense of the proportion of these two kinds of clearances in the FBI data. The FBI does not regularly distinguish primary clearances from secondary clearances,⁴⁵⁷ so we must look to other sources to make a determination. Unfortunately, as with many other aspects of crime clearance rates, there is limited data on the extent to which clearances are primary versus secondary clearances.

In our earlier article, we acknowledged that there was limited empirical evidence on this point, but cited two specific studies with data on secondary clearances suggesting that only a small percentage of crimes were clearances of this type. Our first study was a 1967 Vera Institute study of arrested suspects in one precinct in New York.⁴⁵⁸ The study found that, after *Miranda*, only a small fraction of additional crimes were solved through interrogation.⁴⁵⁹ We also cited the *Yale Law Journal* study from New Haven the summer after *Miranda*, which suggested that about ten to fifteen percent of clearances might be attributable to secondary clearances.⁴⁶⁰ Curiously, while Feeney discusses other aspects of our argument, he does not discuss these two studies.⁴⁶¹

⁴⁵⁷ The FBI does collect data on two different kinds of clearances: (1) crimes cleared by arrest; and (2) crimes cleared by “exceptional means” (such cases where police have identified the perpetrator but are unable to arrest him because he is located in another jurisdiction). *See, e.g.*, UCR-2010, *supra* note 79, at 313 (discussing exceptional clearances). Our sense is that such “exceptional” clearances are, indeed, exceptional and are not worth discussing separately here. *See* Marc Riedel & John G. Boulahanis, *Homicides Exceptionally Cleared and Cleared by Arrest: An Exploratory Study of Police/Prosecutor Outcomes*, 11 HOMICIDE STUD. 151, 151-63 (2007) (finding that 10.7% of homicide cases reported to the Chicago Police Department were cleared by exceptional means); *see also* John P. Jarvis & Wendy C. Regoeczi, *Homicide Clearances: An Analysis of Arrest Versus Exceptional Outcomes*, 13 HOMICIDE STUD. 174, 178-79 (2009) (discussing the Riedel & Boulahanis study). *But cf.* Cassia Spohn & Katharine Tellis, *Justice Denied?: The Exceptional Clearance of Rape Cases in Los Angeles*, 74 ALB. L. REV. 1379, 1380-99 (2011) (finding large numbers of sexual assault cases cleared by exceptional means in Los Angeles). Not only are exceptional clearances a relatively small fraction of clearances, but we have also seen no developed argument that the proportion of exceptional clearances would have been significantly altered by *Miranda*.

⁴⁵⁸ *See* VERA INST. OF JUSTICE, *supra* note 292.

⁴⁵⁹ *See* Cassell & Fowles, *supra* note 5, at 1123 n.329 (citing VERA INST. OF JUSTICE, *supra* note 292, at 68 & n.27).

⁴⁶⁰ *See id.* (citing Wald et al., *supra* note 51, at 1595 n.203).

⁴⁶¹ Since publication of our earlier article, we have located one additional study with data showing only a small percentage of clearances to be secondary clearances, at least in the crime categories for which we consistently find a general *MIRANDA* effect. A study in Rochester, New York, found that 8.8% of robbery clearances, 4.4% of larceny clearances, and 50.8% of burglary clearances by regular police units were secondary arrest clearances. PETER B. BLOCH & JAMES BELL, *MANAGING INVESTIGATIONS: THE ROCHESTER SYSTEM* 27 tbl.5 (1976) (reporting data for “nonteam” clearances). While the burglary secondary clearance percent is

Instead of discussing our data, Feeney turns to the individual police agency studies just discussed. We find it interesting that Feeney fails to consider some of the same studies that he had reviewed when he was arguing that police interrogation is a relatively insignificant way in which police officers solve crimes. Perhaps the reason Feeney fails to discuss these studies is that they would show a very low percentage of cases (sometimes bordering on 0%) in which secondary clearances were obtained, which is perhaps why they tended to show a small role for interrogations in the first place.⁴⁶² Because these studies were designed to follow cases that led to an arrest, they tended not to capture cases in which a crime was cleared without an arrest—the very kinds of cases where secondary clearances ordinarily occur.

Illustrative of this problem of undercounting secondary clearances is the study by Bernard Greenberg and his colleagues in 1974 of the Oakland Police Department. He found that 42 of 330 robberies during the study period in Oakland were cleared, all of them by arrest and prosecution⁴⁶³—suggesting that the primary clearance rate was 100%, mathematically leaving a secondary clearance rate of only 0%.⁴⁶⁴ Similarly, in an earlier study by Greenberg and his colleagues, the means of identification for various crimes was only rarely (3 of 58, or 5.2%) due to “unrelated interrogation.”⁴⁶⁵

Similar low percentages of secondary clearances come from the one pre-*Miranda* study cited by Feeney, the President’s Crime Commission study in Los Angeles in early 1966. This study showed very high percentages of cases cleared by arrest and only a small percentage that could have been cleared through a secondary clearance. For example, the study found that 24 of 26 (92.3%) robbery cases were cleared by arrest, leaving only 2 cases that could have been solved in “other” ways.⁴⁶⁶ Similarly, most burglaries (55 of 68, or 80.8%) were cleared by arrest.⁴⁶⁷ With regard to the “other” category (apart from arrest) for clearing,

very high, the more salient number for present purposes are the robbery and larceny percentages—as they come from categories in which we found a *MIRANDA* effect. The study reported higher secondary clearance numbers for specialized experimental “teams” that were created to investigate crimes, but cautioned that these numbers “cannot be accepted too readily” because the teams may have worked especially hard to show that the experiment was working. *See id.* at 29.

⁴⁶² *See, e.g., supra* notes 405-06 and accompanying text (noting reasons for thinking that the cited studies exclude secondary clearances).

⁴⁶³ GREENBERG ET AL., FELONY INVESTIGATION, *supra* note 418, at 8 tbl.I-2 (displaying results of study).

⁴⁶⁴ Feeney argues that the way in which police usually obtain secondary clearances is by promising suspects that they will not be prosecuted for the additional offenses. Feeney, *supra* note 8, at 64-65. On this theory, if all cleared crimes are prosecuted, the secondary clearance rate is 0%.

⁴⁶⁵ GREENBERG ET AL., ENHANCEMENT, *supra* note 418, at 70 tbl.6-4.

⁴⁶⁶ Isaacs, *supra* note 392, at 95 tbl.B-12.

⁴⁶⁷ *Id.*

secondary clearances were not specifically mentioned at all, suggesting that they must have been a tiny percentage (if any) of the cases involved.⁴⁶⁸

Rather than discuss these studies, Feeney reviews two individual studies that collected data on the proportion of primary clearances to secondary clearances. Both studies show the great majority of clearances are primary clearances. One of these studies is Smith's study in Oakland in 1969.⁴⁶⁹ Within a study period of several weeks, Smith collected data on 106 robbery clearances.⁴⁷⁰ He identified only thirteen of those 106 (12.3%) as secondary clearances.⁴⁷¹ Smith also noted that he found "no evidence of the robbery detectives attempting to aid their clearance records by clearing a number of reports on spurious . . . confessions."⁴⁷² He explained that part of the reason for this was that in 1969 (three years after *Miranda*) "robbers for the most part did not confess . . . [and if] they did confess, it was mainly for the robbery for which they were caught."⁴⁷³ Smith concluded that "[i]n general it was not rewarding for the detective to try to link a suspect with a large number of cases as it was time consuming," particularly in light of the fact that detectives were "[f]requently stymied by the suspect's unwillingness to talk."⁴⁷⁴

John Conklin studied the clearance of robberies in Boston in 1968. He found a slightly larger percentage of secondary clearances, with the vast majority of clearances being primary clearances. Specifically, Conklin found that 17.9% of the robbery clearances in that year came from "clearance[s] by multiple confession[s]."⁴⁷⁵ Conklin noted that "[m]ost robberies solved in this manner were cleared some time after the offense occurred, suggesting that the victim might have been unavailable to make an identification or might have been unable

⁴⁶⁸ The table explaining "other clearance methods" apart from arrests lists juvenile prosecution, declination by prosecutor, victim refusal to procedure, and no-crime determinations as the other specifically identified reasons for a clearance. *Id.* at 95 tbl.B-11.

⁴⁶⁹ See *supra* notes 422-30 and accompanying text (discussing Smith's study and Feeney's analysis of the data). The qualitative data on secondary clearance rates is largely limited to the anecdotal observation that some police officers will try to increase their clearance rates by having an arrested suspect "confess" to a large number of similar crimes. See, e.g., JEROME H. SKOLNICK, *JUSTICE WITHOUT TRIAL: LAW ENFORCEMENT IN DEMOCRATIC SOCIETY* 169-73 (3d ed. 1994). For our purposes, such qualitative assessments are unhelpful. While we agree that such inflated secondary clearances exist, our focus is on the extent of such clearances.

⁴⁷⁰ Smith, *supra* note 372, at 46 tbl.4.

⁴⁷¹ *Id.*

⁴⁷² *Id.* at 78.

⁴⁷³ *Id.* at 79.

⁴⁷⁴ *Id.*

⁴⁷⁵ CONKLIN, *supra* note 370, at 147. Interestingly, Conklin also noted (consistent with the findings in this Article) that in the nation's largest cities, there was little change in robbery clearance rates from 1960 to 1965, but then clearance rates fell significantly over the next several years. *Id.* at 133. Conklin also found a drop in clearance rates in Boston from 1964 to 1968, although the extent of the drop (from 37.4% to 35.8%) was not as large as in other cities. *Id.* at 133-34.

to identify the offender after a lapse of so much time.”⁴⁷⁶ Conklin also added that a suspect who confessed to multiple crimes was rarely punished for his admissions.⁴⁷⁷

As between the Smith study reporting a 12.3% secondary clearance rate and the Conklin study reporting a 17.9% rate, Feeney seizes on the larger of the two numbers to argue that it is “clearly sufficient to cover a drop of the magnitude claimed by Professors Cassell and Fowles.”⁴⁷⁸ It is not clear why Feeney believes it is appropriate to use the single largest figure of secondary clearances that is reported in any of the studies discussed, particularly when Conklin himself thought that his 17.9% figure might have been higher than in other cities.⁴⁷⁹ But, in any event, Feeney has done his math incorrectly in asserting that the 17.9% figure is sufficient to account for our findings.

Feeney appears to misunderstand how coefficients associated with regression equations operate. Feeney is discussing percentages of clearances, while our regressions show a percentage point change or “delta” (a difference between two values, i.e., $\text{delta} = x - y$). When this fact is correctly appreciated, secondary clearances are not sufficient to explain the *Miranda* coefficients on our equations.

For example, taking the robbery category that Feeney discusses, our standard 1998 regression equation⁴⁸⁰ showed a *Miranda* coefficient (i.e., delta) of -6.4% for robbery at a time when robbery clearance rates were 24.2%.⁴⁸¹ Our equation thus predicts that robbery clearance rates for 1995 without *Miranda* would have been 30.6% ($24.2\% + 6.4\%$)—i.e., that clearance rates would have been about 26% higher ($30.6\%/24.2\%$) without *Miranda*. The net result is that the delta, or change due to *Miranda*, exceeds the 17.9% of clearances that Feeney estimates could be due to secondary clearance.⁴⁸² Thus, contrary to Feeney’s claim, even using Feeney’s handpicked high number of secondary clearances does not produce a “clearly sufficient” number to cover the magnitude of our drop.⁴⁸³

⁴⁷⁶ *Id.* at 147.

⁴⁷⁷ *Id.*

⁴⁷⁸ Feeney, *supra* note 8, at 65.

⁴⁷⁹ CONKLIN, *supra* note 370, at 148 (suggesting that this technique of clearing cases may have been more common in Boston).

⁴⁸⁰ The “standard” equation is the three-year *Miranda* phase in that both we and Donohue believe best fits the data.

⁴⁸¹ See Cassell & Fowles, *supra* note 5, at 1086 tbl.II, 1106 tbl.VIII.

⁴⁸² Assuming that 17.9% of the 30.6% predicted clearance rate without *Miranda* was due to secondary clearances, that would mean a 5.4% delta in clearance rates ($30.6\% \times 17.9\%$)—which is smaller than the 6.4% delta that our equations found.

⁴⁸³ Because Feeney was criticizing our earlier article, the numbers quoted above come from our earlier article on data through 1995. The problems with Feeney’s argument also apply given our current robbery clearance rate coefficients. Our latest equations estimate a delta for robbery of about -7.1%. See *supra* note 411 and accompanying text (reporting a Bayesian average coefficient for *Miranda* of -7.092). Given a 2012 robbery clearance rate of 28.1%, see *supra* note 193 and accompanying text, our current predicted clearance rate in the

Even more clear-cut is the case of vehicle theft. Assuming the percentage of secondary clearances for vehicle theft is the same that Feeney selects for robbery (17.9%), that percentage of secondary clearances is far lower than the number needed to explain our delta for vehicle theft. Given that so few vehicle thefts are cleared, our delta for the vehicle theft is a substantial part of the total. Our regression equations suggest that, without *Miranda*, clearance rates for vehicle theft would have been 31% higher (using our 1995 article and data) or 42% higher (using our current article and data).⁴⁸⁴ For Feeney's secondary clearance theory to account for our findings, it has to explain all of the crime categories where we found a *MIRANDA* effect. Because it clearly fails to explain the vehicle theft category, his theory should be rejected.

For all these reasons, we do not believe that individual studies demonstrate that the declining clearance rates we have found are all attributable to lost secondary clearances. But lost secondary clearances surely may have played a role, and it would be nice to have a better quantitative method for determining what fraction of our drop might be attributable to lost secondary clearances. An approach for calculating such a fraction comes from recognizing that analytically the clearance rate consists of two components: (1) the number of arrests per crime, and (2) the number of clearances per arrest.⁴⁸⁵ Feeney's ultimate claim is that a change in the second component—clearances per arrest—is responsible for the observed clearance rate drop. But the available FBI data suggest that clearance rates fell immediately after *Miranda* not only because police were obtaining fewer statements (and thus confessions) from suspects, but also because they were making fewer arrests per crime. In other words, both clearances per arrest and arrests per crime fell after *Miranda*. FBI data for violent crimes from 1965 to 1991⁴⁸⁶ on this issue are plotted in Figure 14.

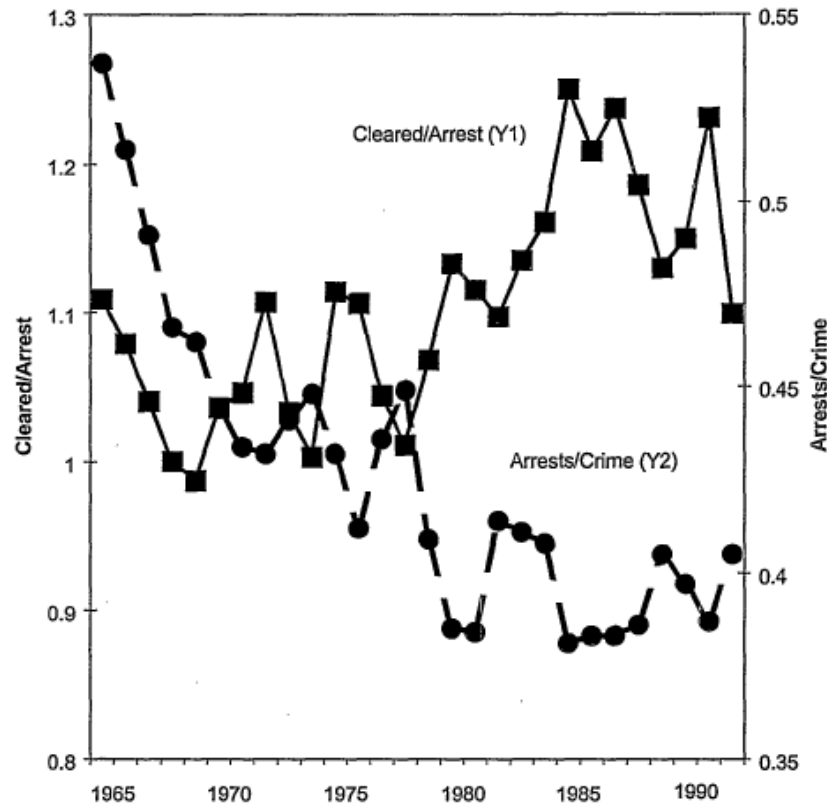
absence of *Miranda* is 35.2%. Assuming that 17.9% of the 35.2% predicted clearance rate without *Miranda* was due to secondary clearances, that would mean that a -6.3% delta in clearance rates ($35.2\% \times 17.9\%$)—which is smaller than the -7.1% delta that our equations found.

⁴⁸⁴ In our earlier article, our regression for vehicle theft produced a *Miranda* coefficient of -4.148. See Cassell & Fowles, *supra* note 5, at 1096 tbl.4. Given a 1995 clearance rate for vehicle theft of 13.2%, that means we were predicting that the clearance rate without *Miranda* would have been about 31% higher (17.2%/13.1%)—far more than Feeney's 17.9% secondary clearance number could explain. Our current equations lead to similar results, given that we find a -5.1% delta in vehicle clearance rates, see *supra* note 193 and accompanying text (Table 7), which, given a 2012 clearance rate for vehicle theft of 11.9%, means we are predicting that the clearance rate without *Miranda* would have been about 42% higher (17.0%/11.9%)—again, far more than Feeney's 17.9% secondary clearance number could explain.

⁴⁸⁵ See Cassell & Fowles, *supra* note 5, at 1123.

⁴⁸⁶ The FBI has published a consistent revision of its arrest data that extends back only to 1965. For further details about this chart, see Cassell & Fowles, *supra* note 5, at 1123-24.

Figure 14 - Arrests/Crime and Clearances/Arrest



On close examination of the chart, the years 1966 to 1968 show a substantial decline in the number of arrests per violent crime. In fact, so far as we can tell from simple visual observation of the available data, more than half of the 1966-to-1968 drop in violent crime clearance rates stemmed from reductions in arrests per crime.

Feeney's response to this chart is primarily to fall back on his other main arguments—i.e., that (despite FBI data to the contrary) clearance rates did not sharply fall from 1966 to 1968, and that there is no reason to think that *Miranda* would have an effect on clearance rates.⁴⁸⁷ These primary arguments have been rebutted elsewhere in our current Article.⁴⁸⁸ Feeney also nitpicks several other points, which hardly suffice for him to carry his point.⁴⁸⁹

⁴⁸⁷ Feeney, *supra* note 8, at 61.

⁴⁸⁸ See *supra* notes 280-327 and accompanying text (arguing that clearance rates did, in fact, fall sharply after *Miranda* as the FBI and many other observers reported) and notes 280-308 and accompanying text (explaining why *Miranda* could harm clearance rates).

⁴⁸⁹ Having established through our regression equations (and related Bayesian model

2. The Harm of Lost Secondary Clearances

For these reasons just given, we think it is likely that most of the clearance rate drop is due to reductions in primary clearances rather than secondary clearances. But even if Feeney is correct in isolating the cause of the clearance rate drop to be only secondary clearances, the other part of his argument—that society is unharmed when police officers solve fewer crimes from each arrest—is incorrect. Perhaps the most important reason to be concerned about lost secondary clearances is their effect on crime victims. Uncleared crimes harm crime victims, who never receive the reassurance that their attackers have been apprehended.⁴⁹⁰ As Jeff Fagan and Daniel Richmond recently put it, “[c]learance rates matter in reassuring people that police are dedicated to their safety, and that they can deliver on promises of security.”⁴⁹¹ Evidence suggests that the principle harms suffered by crime victims includes psychological trauma.⁴⁹² Without a clearance, they will likely continue to fear that they will be victimized

averaging) significant negative *MIRANDA* effects on clearance rates, as well as the fact that the great majority of crime clearances are primary clearances, we think the burden of proof can properly be assigned to Feeney to prove that our negative effects are mostly attributable to secondary clearances. Along these lines, we find it interesting that Feeney criticizes our graph of the FBI data by arguing that, instead of plotting clearances/arrests and arrests/crimes, we should have plotted arrests/crimes. Feeney, *supra* note 8, at 62-63. But Feeney provides no clear reason why this is the proper approach. Nor does he choose to present such a calculation himself. We see no reason to chase down such a calculation, particularly because our chart plots clearances/arrests. Clearance rates are, of course, composed entirely of crimes (i.e., crimes solved divided by crimes committed).

Feeney also says (correctly) that our chart includes data from major cities like New York City, which should (in his view) be eliminated from the data to reach accurate conclusions. *See id.* at 63-64. We have shown earlier that eliminating flawed large city data from consideration does not alter our conclusions. *See supra* notes 280-308 and accompanying text. Feeney also complains that our graph starts in 1965 and that a longer pre-*Miranda* period would be preferable. *See* Feeney, *supra* note 8, at 64. We naturally would like more pre-*Miranda* data, but the FBI has not made any such data available. Finally, Feeney notes that attitudes about the importance of secondary clearances may have changed at some point, with the effect of minimizing officers’ interests in obtaining such clearances. *See id.* at 66-71. But Feeney does not press this argument very hard, and he even ends up conceding that such changing attitudes would not have occurred during the 1966-to-1968 period of interest to us. *See id.* at 70 (“It is highly doubtful that much of the criticism of secondary clearances . . . had filtered its way down to working level police officers by 1966-68.”).

⁴⁹⁰ *See* Spohn & Tellis, *supra* note 457, at 1399-415 (discussing the experiences of sexual assault victims in the crime clearance process).

⁴⁹¹ Jeffrey Fagan & Daniel Richman, *Understanding Recent Spikes and Longer Trends in American Murders*, 117 COLUM. L. REV. (forthcoming 2017) (manuscript at 41) (on file with authors).

⁴⁹² *See* Paul G. Cassell, *In Defense of Victim Impact Statements*, 6 OHIO ST. J. CRIM. L. 611, 619-21 (2009); *see also* LESLIE SEBBA, *THIRD PARTIES: VICTIMS AND THE CRIMINAL JUSTICE SYSTEM* 80-81 (1996).

again.⁴⁹³ Elizabeth Mustaine explained: “For victims, witnesses, and others connected to criminal events, whether or not a criminal offense is cleared by the police is an important personal and emotional issue. For victims, knowing that perpetrators who offended against them are identified and arrested may be important for mental health and daily functioning.”⁴⁹⁴ Uncleared crimes leave their “victims without answers.”⁴⁹⁵ Victims understandably want to see justice done, and that is often not possible until the crime is cleared. Victims of property crimes also benefit from each clearance, because even if the suspect is never charged or convicted for the secondary crime, the confession creates the possibility of the return of stolen property⁴⁹⁶ or restitution.⁴⁹⁷

Fewer secondary clearances also harm law enforcement. Fewer cleared crimes leave police investigators less able to focus effectively on crimes that require their attention. They are forced to spend time attempting to solve crimes that would have been solved by talking with a suspect briefly.⁴⁹⁸ The paucity of police resources makes this unnecessary diversion a possible concern. Multiple confessions are also useful to help police officers discern the *modus operandi* (or “MO”) of professional criminals.⁴⁹⁹

D. *Falling Clearance Rates as an Understated Telltale for Lost Convictions*

For the reasons just given, lost secondary clearances are a matter of concern in and of themselves. However, a much broader response is also available to the argument that lost secondary clearances are of little consequences. The broader point is that we are interested in declining clearance rates not only because of the intrinsic value of clearances, but also because they signal a presumably much

⁴⁹³ See Riedel, *supra* note 110, at 1148; Roberts, *supra* note 153, at 61; see also PRESIDENT’S TASK FORCE ON VICTIMS OF CRIME, FINAL REPORT 28 (1982), <https://www.ovc.gov/publications/presdntstskforcprpt/87299.pdf> [<https://perma.cc/NVR6-T2LQ>].

⁴⁹⁴ Mustaine et al., *supra* note 148, at 256.

⁴⁹⁵ Fagan & Richman, *supra* note 491 (manuscript at 34).

⁴⁹⁶ See GREENBERG ET AL., ENHANCEMENT, *supra* note 418, at 45 (reporting detectives’ views that the possibility of returning property to burglary victims justified attempts to obtain multiple clearances).

⁴⁹⁷ See 18 U.S.C. § 3663(a)(1)(A) (2012) (providing for restitution to victims). See generally DOUGLAS E. BELOOF, PAUL G. CASSELL & STEVEN J. TWIST, VICTIMS IN CRIMINAL PROCEDURE 607-18 (3d ed. 2010) (discussing the importance of restitution).

⁴⁹⁸ See Leo, *Police Interrogation in America*, *supra* note 57, at 99 (reporting police views that “getting a confession makes the investigator’s job a lot easier . . . If he gets a confession . . . he doesn’t have to spend hours tracking down witnesses, running fingerprints, putting together line-ups, etc.”). But cf. Smith, *supra* note 419, at 79 (noting that police officers in Oakland were not rewarded for trying to link a suspect to “a large number of cases”).

⁴⁹⁹ See GREENBERG ET AL., ENHANCEMENT, *supra* note 418, at 45-46 (reporting detectives’ views to this effect).

larger decline in the *confession* rate. And declining confession rates are clearly a matter of significant public concern.

If police clear fewer crimes because they obtain fewer statements from suspects, subsequent prosecutions will be impaired. It could conceivably be true that it makes little difference whether an arrested robber confesses to four crimes or to one. But it makes a considerable difference whether he confesses to one crime or none, as a confession is quite important to prosecutors.⁵⁰⁰ *Miranda* does not generally reduce the number of confessions from four to one; it reduces them to zero by occasionally blocking police interrogation entirely.⁵⁰¹ It seems hard to view such declining clearances as anything other than a serious social cost.

Moreover, there is every reason to think that the clearance rate changes that we have been investigating significantly understate *Miranda*'s harmful effects. As Feeney (and others) has accurately explained, good reasons exist for thinking that in many cases *Miranda* will not prevent police from clearing a crime, but could prevent police from obtaining a conviction.⁵⁰² If police have enough evidence for probable cause to arrest, but not enough evidence to obtain a conviction beyond a reasonable doubt, interrogation may be critical to securing a confession needed for conviction.⁵⁰³

Confessions can be extremely important in securing a conviction.⁵⁰⁴ Feeney himself has collected data on precisely this point. In his 1983 study *Arrests Without Conviction: How Often They Occur and Why*, Feeney emphasizes the importance of confessions, writing that "[a] confession by the defendant stating that he committed the crime is powerful evidence The conviction rate in robbery and burglary cases involving confessions is 40 to 180 percent greater than in the cases not involving confessions."⁵⁰⁵ In his article responding to us,

⁵⁰⁰ See Cassell & Hayman, *supra* note 58, at 909-16 (finding that whether police obtain an incriminating statement makes a significant difference in case outcome); Leo, *Police Interrogation in America*, *supra* note 57, at 295 (suspects who incriminated themselves were twenty-six percent more likely to be convicted).

⁵⁰¹ See Cassell, *supra* note 16, at 494-96 (presenting data on what percentage of suspects do not waive rights and thus cannot be interrogated).

⁵⁰² See Feeney, *supra* note 8, at 42 ("It is certainly possible that giving the *Miranda* warnings has some impact upon the willingness of a suspect to talk with the police and that the decision hampers the police in conducting post-arrest interrogations."); see also Donohue, *supra* note 7, at 1156 ("If *Miranda* significantly stops the flow of damaging statements by criminals to the police, it could well reduce the rate of successful prosecutions of crime even if it has no impact on measured clearance rates.").

⁵⁰³ See Cassell & Hayman, *supra* note 58, at 912 tbl.16 (reporting data showing that suspects who confessed are more likely to be convicted and less likely to receive favorable plea bargains).

⁵⁰⁴ See Cassell, *supra* note 16, at 422-37 (collecting multiple studies regarding the importance of obtaining a confession to securing a conviction).

⁵⁰⁵ FEENEY, DILL & WEIR, *supra* note 56, at 141.

however, Feeney repackages his earlier findings, explaining (in a footnote) that confessions show only a “marginal contribution” to convictions.⁵⁰⁶

Conviction rates 40% to 180% higher are not “marginally” better—they are substantially better. And it is for this reason alone that society should be extremely concerned about declining clearance rates. They stand as a surrogate for declining confession rates—and thus ultimately as an understated measure of the number of criminals who are escaping prosecution due to the decline in confession rates after *Miranda*.⁵⁰⁷

In this connection, it is interesting to observe that the title of Feeney’s article is *Police Clearances: A Poor Way to Measure the Impact of Miranda on the Police*. His title brings to mind Winston Churchill’s quip that “democracy is the worst form of Government except all those other forms that have been tried from time to time.”⁵⁰⁸ Clearance rates may, indeed, be a poor way—or more precisely, an understated way—of measuring *Miranda*’s impact. But they appear to be the only quantitative way to measure *Miranda*’s effects across the country over its fifty years of existence.

Feeney’s argument against clearance rates as a way of measuring *Miranda*’s effect also might have more bite if he proposed an alternative. But remarkably for someone who has written an article spanning some 114 pages, Feeney does not offer any alternative approach to determining *Miranda*’s effects. We are thus left to draw the best inferences we can from the only long-term measure we have. Clearance rates for several important crime categories had statistically significant reductions following *Miranda*—reductions that have persisted over time and cannot be explained through other factors. These clearance rate declines strongly suggest that *Miranda*’s dissenters were correct in predicting significant reductions in confession rates due to the *Miranda* regime.

E. *How Police Interrogation Remains Important in an Era of Advancing Forensic Science*

So far in this Part, we have discussed the studies cited by Feeney, most of which were conducted in the 1970s and 1980s. Have things changed since then? In particular, have advances in forensic science rendered police interrogation irrelevant?

The idea that crimes are now typically solved through advanced forensic science techniques—rather than through old-fashioned methods such as police interrogations—has been overstated to such an extent that it has its own Wikipedia entry: the “CSI effect.”⁵⁰⁹ The basic idea is that exaggerated portrayal

⁵⁰⁶ Feeney, *supra* note 8, at 42 n.107.

⁵⁰⁷ Cf. Cassell, *supra* note 16, at 437-40 (calculating based on confession measure that *Miranda* produces a loss of about 3.8% of all convictions).

⁵⁰⁸ Winston Churchill, Speech, House of Commons, November 11, 1947, in 7 WINSTON S. CHURCHILL: HIS COMPLETE SPEECHES, 1897-1963, at 7563, 7566 (Robert Rhodes James ed., 1974).

⁵⁰⁹ See *CSI Effect*, WIKIPEDIA (Feb. 2, 2017, 11:09 AM),

of forensic science on crime television shows, such as *CSI: Crime Scene Investigation*, creates the inaccurate belief (in the general public and jurors in criminal cases) that forensic evidence is often available to the police.⁵¹⁰ In fact, despite important advances in forensic science, traditional law enforcement techniques, including interrogation, remain vital for solving cases.⁵¹¹

Forensic science relies on the examination of physical trace data collected from crime scenes to identify criminals.⁵¹² Despite the continued advancement of forensic science's ability to assist law enforcement in crime investigation,⁵¹³ national crime clearance rates generally show no improvement in recent years.⁵¹⁴ Part of the reason forensic science has been unable to reverse clearance rate trends is the frequent unavailability of physical trace data at crime scenes.⁵¹⁵ For example, a recent report has found that forensic evidence was submitted to crime labs in less than 15% of burglaries and robberies, and less than 10% of assault cases had physical evidence examined in crime labs.⁵¹⁶ Even where physical evidence has been collected and submitted to forensic scientists, "a very low percentage of arrests actually [have] physical evidence examined before the arrest."⁵¹⁷ Indeed, "more forensic analysis occur[s] after arrests than before

https://en.wikipedia.org/wiki/CSI_effect [<https://perma.cc/5V3D-FZRS>].

⁵¹⁰ *Id.*

⁵¹¹ See INBAU ET AL., *supra* note 82, at xii ("Many criminal cases, even when investigated by the best qualified police departments, are capable of solution only by means of an admission or confession from the guilty individual or upon the basis of information obtained from the questioning of other criminal suspects.").

⁵¹² See *Forensic Sciences: Types of Evidence*, NAT'L INST. JUST. (May 29, 2015), <https://nij.gov/topics/forensics/evidence/Pages/welcome.aspx> [<https://perma.cc/4SUH-PKRX>].

⁵¹³ See NAT'L INST. OF JUSTICE, THE IMPACT OF FORENSIC SCIENCE RESEARCH AND DEVELOPMENT 6 (2015), <https://www.ncjrs.gov/pdffiles1/nij/248572.pdf> [<https://perma.cc/J2CF-D598>] (analyzing how advancements in forensic science improve scientists' ability to effectively assist law enforcement in solving crimes).

⁵¹⁴ See *supra* Figures 2-7; see also Nagin, *supra* note 151, at 77 ("Modern forensic methods could improve the effectiveness of postcrime investigations, but . . . clearance rates for several crime types have remained stable over the period 1970 to 2007."). Interestingly, the only exception to this fact is the clearance rate for larceny, a crime for which forensic science does not seem to be generally important. See *supra* Figure 6 (depicting the increase in larceny clearance rates in recent years).

⁵¹⁵ See, e.g., JOSEPH PETERSON ET AL., NAT'L INST. OF JUSTICE, THE ROLE AND IMPACT OF FORENSIC EVIDENCE IN THE CRIMINAL JUSTICE PROCESS 3-7 (2010), <https://www.ncjrs.gov/pdffiles1/nij/grants/231977.pdf> [<https://perma.cc/VDJ6-GY9A>] (providing summaries of the low forensic evidence in various property crimes).

⁵¹⁶ *Id.* at 122; see also BRENT E. TURVEY, CRIMINAL PROFILING: AN INTRODUCTION TO BEHAVIORAL EVIDENCE ANALYSIS 148-49 (4th ed. 2012) (examining additional reports of low availability of forensic evidence and the "diminished role for forensic evidence and a lack of emphasis on it in criminal investigations and subsequent prosecutions").

⁵¹⁷ PETERSON ET AL., *supra* note 515, at 123.

arrests.”⁵¹⁸ Even for crimes like homicide where forensic evidence is often submitted to crime laboratories,⁵¹⁹ clearance rates continue to be low.⁵²⁰

The fact that forensic evidence is not generally available in criminal cases provides a response to Dripps’s argument, advanced in this Symposium, that the chain of events needed for *Miranda* to produce a loss of evidence is “long and improbable.”⁵²¹ Without going through each step in his logic, several points are worth highlighting. Dripps mentions the possibility of noncustodial questioning of a suspect outside the *Miranda* regime; but the available data shows that about seventy percent of all police questioning of defendants is custodial and that noncustodial questioning is less effective.⁵²² Dripps mentions informants as a possible alternative source of information. But, as the police studies just reviewed show, informants are involved in a tiny sliver of cases.⁵²³ Dripps also alludes to the possibility that a “digital portrait” might exist of the suspect, without providing any suggestion that this happens with enough regularity to be a significant factor in discussions about *Miranda*.⁵²⁴ So too with an electronic surveillance order, which is so time consuming and expensive as to be all-but-impossible to use in anything other than the most extraordinary cases.

In any event, it is possible to determine how often lost confessions are necessary to obtain a conviction. Cassell collected all of the available data on this subject in 1996, finding that confessions were needed in about 23.8% of all cases.⁵²⁵ Dripps offers no good reason to think that this figure has changed significantly in recent years.

⁵¹⁸ TOM MCEWEN, NAT’L INST. OF JUSTICE, FINAL REPORT: THE ROLE AND IMPACT OF FORENSIC EVIDENCE IN THE CRIMINAL JUSTICE SYSTEM 118 (2010), <https://www.ncjrs.gov/pdffiles1/nij/grants/236474.pdf> [<https://perma.cc/VA8P-ZA4R>].

⁵¹⁹ See PETERSON ET AL., *supra* note 515, at 122 (finding that forensic evidence is submitted to the crime lab eighty-nine percent of the time for homicides).

⁵²⁰ See *supra* Figure 4; see also *Getting Away with Murder*, ECONOMIST (July 4, 2015), <http://www.economist.com/news/united-states/21656725-police-fail-make-arrest-more-third-nations-killings-getting-away> [<https://perma.cc/J57M-M58N>] (commenting on continually declining homicide clearance rates).

⁵²¹ Donald A. Dripps, *Miranda for the Next Fifty Years: Why the Fifth Amendment Should Go Fourth*, 97 B.U. L. REV. 893, 927-28 (2017).

⁵²² See *infra* notes 726-28 and accompanying text (noting that the Cassell and Hayman study found a 56.9% success rate for custodial questioning versus a 30.0% success rate for noncustodial questioning).

⁵²³ See, e.g., ECK, *supra* note 429, at 177 tbl.6-4 (showing that informants provide a suspect description to patrol officers in between 0.0% and 0.9% of patrol officer cases and 0.0% to 7.3% of detective cases).

⁵²⁴ Dripps, *supra* note 521, at 928 (claiming that police could use a digital portrait of the suspect “to convict or to support additional warrant searches”).

⁵²⁵ Cassell, *supra* note 16, at 434 tbl.2.

VI. THE CAUSALITY QUESTION: ATTRIBUTING DECLINING CLEARANCE RATES TO *MIRANDA*

So far we have presented our updated evidence that, controlling for major criminal justice and socioeconomic variables, in our regression equations the crime clearance rates for robbery, larceny, vehicle theft, and possibly burglary fell significantly after *Miranda*.⁵²⁶ The question remains whether *Miranda* caused those drops. Regression analysis can never establish causality. Instead, the causal conclusion can only come from combining the information provided by the regression equations with theory and other information to determine whether a causal interpretation is a reasonable one. The potential obstacle to concluding that *Miranda* was the cause of the 1966-to-1968 drop in clearance rates is the problem of the “omitted variable” or “alternate causality”—that is, some other change in society, unaccounted for in our regression equations, was responsible for the reduction in clearance rates.

In interrupted time series analysis, especially without control groups, it is important to consider such potentially omitted variables. In working on both our 1998 article and this Article, we have made aggressive efforts to identify possible “omitted” variables that might influence our conclusions⁵²⁷ and discuss the various possibilities of such an omission in this Part. Before turning to these other, thus-far-unconsidered candidates for the omitted variable, we should first discuss briefly what we are looking for. To be a strong candidate for the omitted variable, the variable must change sharply in the critical 1966-to-1968 period—but not elsewhere. For example, Figure 5 above showed that robbery clearances plunged from 37.6% in 1965 to 26.9% in 1968 and have remained relatively stable since.⁵²⁸ Our regression equations suggest that about half of this drop is explained by a structural shift at the time of *Miranda*, controlling for such criminal justice variables as crime rates and police personnel and such socioeconomic and demographic variables as unemployment and juveniles in the population. BMA analysis confirms that these findings are not caused by specification of our equations. Now that we have used such analysis to rule out the influences of those factors, we next look to the relevant theoretical, anecdotal, and logical explanations that could reveal what was the cause of the shift in the clearance rate: *Miranda* or something else?

A. *Contemporaneous Explanations of the Clearance Rate Decline*

In assessing plausible causal factors for the decline in clearance rates, it is useful to first examine the contemporaneous assessments that were made. Crime

⁵²⁶ In some other specifications, clearance rates for other crimes fell as well. We focus on our main equations in this Part.

⁵²⁷ See Cassell & Fowles, *supra* note 5, at 1081, 1107.

⁵²⁸ See Daniel S. Nagin, Robert M. Solow & Cynthia Lum, *Deterrence, Criminal Opportunities, and Police*, 53 CRIMINOLOGY 74, 77 (2015) (noting largely stable clearance rates for robbery and other crimes for last several decades).

clearance rate declines in 1966 through 1968 were discussed at the time they happened. What was the contemporaneous understanding?

The national clearance rate declines were reported by the FBI in its annual Uniform Crime Reports. The FBI had strong incentive to provide explanations for apparently declining police performance. During the critical 1966-to-1968 period, the authors of the FBI's UCR listed the following causes of falling clearance rates: "*court decisions which have resulted in restrictions on police investigative and enforcement practices*, sharply increasing police workloads not limited to crime increases, an almost static ratio of police to population not commensurate with the sharp rise in crime, and constant increasing criminal mobility."⁵²⁹ Setting aside the first italicized factor ("court decisions"), the regression equations control for two of the remaining three factors the FBI cited: the increase in police workloads and the static ratio of police strength. The last factor cited—increased mobility of those committing crimes—may have some long-term explanatory power, but seems an unlikely explanation for relatively sudden shifts in crime clearance rates. Increasing mobility could only affect clearances over the long haul. That leaves the first factor—"court decisions which have resulted in restrictions on police investigative and enforcement practices"—as the logical remaining explanation. Of course, that is the explanation we have focused on in this Article through our *MIRANDA* variable—a factor identified by the FBI at the time.

Confirming the FBI's contemporaneous explanation were the assessments from those who knew firsthand the effects of those court decisions: law enforcement officers who questioned suspects both before and after the Supreme Court imposed *Miranda's* constraints. Otis Stephens and his colleagues interviewed officers on the streets in Knoxville, Tennessee, and Macon, Georgia in 1969 and 1970.⁵³⁰ Virtually all of the officers surveyed believed that Supreme Court decisions had harmed their work, and most attributed this negative influence first and foremost to *Miranda*.⁵³¹ Similarly, in New Haven, Connecticut, Yale students interviewed most of the detectives involved in the

⁵²⁹ UCR-1967, *supra* note 79, at 30 (emphasis added); *see also* Malnic, *supra* note 345, at 27 ("FBI director J. Edgar Hoover said increased . . . restrictions on police investigative and enforcement practices are contributing to the reduced rates of solving serious crimes.").

⁵³⁰ *See* Otis H. Stephens, Robert L. Flanders & J. Lewis Cannon, *Law Enforcement and the Supreme Court: Police Perceptions of the Miranda Requirements*, 39 TENN. L. REV. 407, 411 (1972).

⁵³¹ *See id.* at 420 tbl.IV (finding "over 90%" believed the Court decisions created negative effects, with "58% attribut[ing] this negative influence primarily to *Miranda*"). The percentage identifying *Miranda* as responsible might have been higher but for a memorandum on legal restrictions governing search and seizure that circulated shortly before some of the interviews. *See id.* at 421. Seventy-four percent said that advice of defendants' rights had an adverse effect on investigations. *See id.* at 424 tbl.VIII. In individual interviews, the officers surveyed generally gave negative assessments of *Miranda*. *See id.* at 426-29. In light of these findings, Stephens's conclusion that his survey showed little impact from *Miranda*, *see id.* at 430-31, is hard to understand.

interrogations they observed during the summer of 1966 as well as an additional twenty-five detectives.⁵³² They reported that “the detectives unanimously believe [*Miranda*] will unjustifiably [help the suspect].”⁵³³ They also reported that “[t]he detectives continually told us that the decision would hurt their clearance rate and they would therefore look inefficient.”⁵³⁴ Also, law student Gary Wolfstone sent letters in 1970 to police chiefs and prosecutors in each state and the District of Columbia. Most agreed that *Miranda* at least raised obstacles to law enforcement.⁵³⁵ And, in Seaside City, James Witt interviewed forty-three police detectives before 1973.⁵³⁶ Witt reported that the detectives “were in almost complete agreement over the effect that the *Miranda* warnings were having on the outputs of formal interrogation. Most believed that they were getting many fewer confessions, admissions and statements.”⁵³⁷ Witt also found the detectives to be “quick to refer to a decline in their clearance rate when discussing problems emanating from the *Miranda* decision.”⁵³⁸

Concerns about *Miranda* continue to be expressed by law enforcement.⁵³⁹ For example, when the Supreme Court heard arguments in *Dickerson v. United States*⁵⁴⁰ (involving the congressional statute designed to supersede *Miranda*⁵⁴¹) a number of law enforcement organizations filed briefs in support of the Fourth Circuit’s decision restricting circumstances in which confessions would be suppressed for *Miranda* violations.⁵⁴² But the more telling evidence is what the

⁵³² See Wald et al., *supra* note 51, at 1528.

⁵³³ *Id.* at 1611.

⁵³⁴ *Id.* at 1612 n.265.

⁵³⁵ See Gary L. Wolfstone, *Miranda—A Survey of Its Impact*, 7 PROSECUTOR 26, 27 (1971).

⁵³⁶ Witt’s article was published in 1973. See Witt, *supra* note 87, at 320. He appears to have begun collecting his data sometime after 1968.

⁵³⁷ *Id.* at 325.

⁵³⁸ *Id.* at 330.

⁵³⁹ See Cassell & Fowles, *supra* note 5, at 1108-10. *But cf.* Victoria M. Time & Brian K. Payne, *Police Chiefs’ Perceptions About Miranda: An Analysis of Survey Data*, 30 J. CRIM. JUST. 77, 84 (2002) (reporting that 52.6% of chiefs surveyed believed that *Miranda* warnings hindered voluntary confessions, but 64.2% did not believe that *Miranda* made it more difficult for police to do their jobs); Marvin Zalman & Brad W. Smith, *Attitudes of Police Executives Toward Miranda and Interrogation Policies*, 97 J. CRIM. L. & CRIMINOLOGY 873, 893 (2007) (finding police administrators did not generally believe *Miranda* made it more difficult for police to do their jobs).

⁵⁴⁰ 530 U.S. 428 (2000).

⁵⁴¹ Paul G. Cassell, *The Statute That Time Forgot: 18 U.S.C. § 3501 and the Overhauling of Miranda*, 85 IOWA L. REV. 175, 177 (1999) (discussing § 3501’s replacement of *Miranda*); see also Paul G. Cassell, *The Paths Not Taken: The Supreme Court’s Failures in Dickerson*, 99 MICH. L. REV. 898, 898 (2001) (criticizing *Dickerson*’s failure to uphold § 3501).

⁵⁴² See, e.g., Brief for the Criminal Justice Legal Foundation as Amicus Curiae in Support of Affirmance, *Dickerson v. United States*, 530 U.S. 428 (2000) (No. 95-5525); Brief for Fraternal Order of Police as Amicus Curiae Urging Affirmance, *Dickerson v. United States*, 530 U.S. 428 (2000) (No. 99-5525); Brief for National Association of Police Organizations

police thought at the time *Miranda* was handed down, when they had experience both with and without the new rules. Those firsthand, contemporaneous reports—including the FBI statements of concern about recent “court decisions”—are strong evidence that *Miranda* was the cause of the clearance rate drop.

B. *Alternate Explanations Proposed by Feeney*

In continuing our search for possible alternative causalities besides *Miranda*, we now have the benefit of Feeney’s labors. Having argued at length (for reasons discussed in previous Sections) that clearance rates did not fall sharply after *Miranda*, Feeney then somewhat paradoxically engaged in an aggressive search to find explanations for why clearance rates would have fallen sharply. Having canvassed the relevant literature, he offered two alternative explanations—race riots, and a heroin “epidemic” breaking out at exactly the same time as *Miranda*.⁵⁴³ We consider both of these possibilities at some length here because, given the time and effort Feeney has invested in searching for alternate causalities, if his identified alternatives fail then we have increased confidence that *Miranda* is to blame.

1. Race Riots and Related Disturbances

Feeney’s top choice for an alternative cause for the post-*Miranda* clearance rate decline is “race riots and disturbances.”⁵⁴⁴ Feeney begins his argument by prominently quoting a 1975 book by Jerry Wilson, Chief of the D.C. Police Department, who said that urban riots (and shortly thereafter, the antiwar and campus disorders) were the principal issue in police “administration” in the middle and later 1960s.⁵⁴⁵ But Feeney neglects to mention that Wilson specifically discusses not only issues of “administration,” but also—more directly relevant to our discussion—rising crime rates due to restrictive court rules. Wilson identifies riots as fourth on a list of five specific factors that explained crime rate increases in the 1960s, just ahead of increased use of

et al. as Amici Curiae in Support of Affirming the Decision of the U.S. Court of Appeals, *Dickerson v. United States*, 530 U.S. 428 (2000) (No. 99-5525); Brief for National District Attorneys Association, Various State Prosecuting Associations & the Police Executive Research Forum in Support of the Judgment Below, *Dickerson v. United States*, 530 U.S. 428 (2000) (No. 99-5525). Thomas and Leo argue that these briefs from major national organizations appear “to be the result of Paul Cassell’s impressive lobbying and advocacy efforts, not the natural inclination of law enforcement, on its own, to abandon *Miranda*.” Thomas & Leo, *supra* note 23, at 253. But collecting these briefs required little more than a single short phone call advising the organizations of the amicus briefing schedule, not a major professorial effort to indoctrinate them on a particular theory about *Miranda*’s effects.

⁵⁴³ Feeney, *supra* note 8, at 76-83.

⁵⁴⁴ *Id.* at 77.

⁵⁴⁵ *Id.* (quoting JERRY WILSON, POLICE REPORT: A VIEW OF LAW ENFORCEMENT, at viii (1975)).

heroin.⁵⁴⁶ Wilson's top three explanatory factors are all included in our regression equations. Wilson wrote that rising crime in the 1960s is attributable to: urbanization, the maturation of baby boomers into their crime prone years, and, of importance here, "increasingly restrictive court rules which impinged on both the police and the courts"—including specifically "*Miranda*."⁵⁴⁷ Wilson also discussed at length the harmful impact on the District of Columbia of *Mallory v. United States*,⁵⁴⁸ a decision regarding the Federal Rules of Criminal Procedure that restricted the ability of police officers to question suspects in D.C. ten years before *Miranda*.⁵⁴⁹ If anything, Wilson's views regarding the harmfulness of court restrictions on police interrogation support our view that *Miranda* is a potential candidate for the post-1965 clearance rate declines.

With regard to riots, Feeney acknowledges that in our earlier article we briefly considered this possibility.⁵⁵⁰ In our view, however, events like the race riots Feeney refers to—and more broadly, declining police-citizen relations—are poor candidates for explaining the 1966-to-1968 decline in clearance rates that we are interested in. To be sure, citizen cooperation is essential for clearing many crimes, as witnesses (and victims) must both report crimes to police and give information about those crimes for police to clear them.⁵⁵¹ But although worsening relations could conceivably have played a role in declining clearance rates during the 1960s, we think it an unlikely candidate for an alternative causality for the nationwide clearance rate declines in 1966 to 1968. It is improbable that police-citizen relations would have deteriorated substantially across the country over such a short period of time. Indeed, the Gallup Poll suggests increased respect for the police around the time of *Miranda*. In April 1965, 70% of respondents across the country had a great deal of respect for the

⁵⁴⁶ WILSON, *supra* note 545, at 31, 33 (mentioning riots and heroin, respectively, as a contributing factors). Wilson also discusses, as a background factor for rising crime, the fact that government officials, at least in the early 1960s, were willing to "live with" rising crime rates. *Id.* at 35-36.

⁵⁴⁷ *Id.* at 29. The Court decisions that Wilson cited in addition to *Miranda* were *Mapp v. Ohio*, 367 U.S. 643 (1961), *Escobedo v. Illinois*, 378 U.S. 478 (1964), and the line-up/identification cases (*United States v. Wade*, 388 U.S. 218 (1967), *Gilbert v. California*, 388 U.S. 263 (1967), and *Stovall v. Denno*, 388 U.S. 293 (1967)). WILSON, *supra* note 545, at 29. We discuss *Escobedo* at *infra* notes 756-65 and discuss the line-up cases at *infra* notes 643-53 and accompanying text.

⁵⁴⁸ 354 U.S. 449 (1957).

⁵⁴⁹ WILSON, *supra* note 545, at 47-50 (calling *Mallory* an "ill-advised" decision that should have been overturned, but also noting that D.C. police might have been better to use the decision as a basis for trying to obtain more manpower to help function under the decision).

⁵⁵⁰ Feeney, *supra* note 8, at 77 (citing Cassell & Fowles, *supra* note 5, at 1114-15).

⁵⁵¹ See Desmond, Papachristos & Kirk, *supra* note 138, at 858; W. S. Wilson Huang & Michael S. Vaughn, *Support and Confidence: Public Attitudes Toward the Police*, in AMERICANS VIEW CRIME AND JUSTICE: A NATIONAL PUBLIC OPINION SURVEY 31, 31 (Timothy J. Flanagan & Dennis R. Longmire eds., 1996).

police, a percentage that rose to 77% two years later in August 1967.⁵⁵² Although we have been unable to locate consistent polling data on public confidence in the police throughout the decade, the polls we have found reported generally high public confidence in the police, although then (as now) minority communities were more skeptical than were their white counterparts.⁵⁵³

In our earlier article, we also explained that any decline in trust for the police would have been a more long-run phenomenon, extending from the late 1950s through (at least) the mid-1970s, from the earliest days of the civil rights protests to the waning days of Vietnam War protests and Watergate disillusionment. Such an extended decline would therefore not explain the sharp decline in clearance rates of the late 1960s. Also, the late 1960s, like the years before and after, were a time of rising public concern about crime,⁵⁵⁴ which might have produced more, rather than less, willingness to help the police.⁵⁵⁵ We also noted in our earlier article that it is quite possible that declining confidence in the police was more concentrated in some parts of the country than others, and in some kinds of geographical areas than in others (e.g., large cities). Yet the sudden drops in clearance rates in 1966 and 1967 were reported by all population groups and all geographic divisions.⁵⁵⁶

In response to these points, Feeney argues that we needed to pay more attention to “the turbulent race riots and disturbances that shook the nation *in 1965-68*”⁵⁵⁷—and then he goes on to quantify (in the next sentence of his article) that the riots “affected 570 different cities *during 1967-69*.”⁵⁵⁸ The fact that Feeney himself gives—in consecutive sentences in his article—two different time frames for the riots (1965-68 vs. 1967-69)—illustrates a problem for his

⁵⁵² See 3 GEORGE H. GALLUP, *THE GALLUP POLL: PUBLIC OPINION 1935-1971*, at 1935, 2077 (1972).

⁵⁵³ See NAT'L CTR. ON POLICE & CMTY. RELATIONS, *A NATIONAL SURVEY OF POLICE AND COMMUNITY RELATIONS*, preface, 10 (1967) (reprinting a national Harris Poll finding a “good-excellent” rating of 76% for federal law enforcement, 70% for state law enforcement, and 65% for local law enforcement around 1966). The same polls also suggest lower confidence in the police in minority communities. See *id.* at 11-13. However, this low confidence existed well before 1966. See *id.* at 16 (citing CALIFORNIA ADVISORY COMM. TO THE U.S. COMM'N ON CIVIL RIGHTS, *REPORT ON CALIFORNIA: POLICE-MINORITY GROUP RELATIONS* 8 (1963)).

⁵⁵⁴ See BUREAU OF JUSTICE STATISTICS, U.S. DEP'T OF JUSTICE, *SOURCEBOOK OF CRIMINAL JUSTICE STATISTICS—1994*, at 166 tbl.2.31 (Kathleen Maguire & Ann L. Pastore eds., 1994) (reporting that 49% of Harris Poll respondents felt more uneasy on the streets in 1966 than in the previous year; this number increased to 53% in 1968 and to 55% in 1969).

⁵⁵⁵ Public attitudes towards the police “have changed little since the 1970s.” See Emily Ekins, *Policing in America: Understanding Public Attitudes Toward the Police. Results from a National Survey*, 1 (CATO Inst., Working Paper, Dec. 7, 2016), <https://www.cato.org/publications/working-paper/policing-america-understanding-public-attitudes-toward-police-results> [<https://perma.cc/YN7V-34WR>].

⁵⁵⁶ See *supra* notes 116-17 and accompanying text.

⁵⁵⁷ Feeney, *supra* note 8, at 77 (emphasis added).

⁵⁵⁸ *Id.* (emphasis added).

argument. The timing of the riots is quite important, because we are seeking to explain nationwide declines in clearance rates during 1966 to 1968. If the riots started earlier (1965) or ended later (1969), the timing would not quite fit the clearance rate changes we are seeking to explain. The best available quantitative evidence suggests that the riots began in 1964 and extended through 1971, peaking in 1968.⁵⁵⁹ Not only does that time frame not fit the 1966-to-1968 drop, but it also fails to fit the fact that clearance rates failed to rebound after 1971.

Feeney also overstates the scope of the riots, at least when compared to the vast size of the American criminal justice system. Feeney presents what might be described as the gee-whiz statistic that the riots around the country involved 37,000 arrests—not mentioning that, during 1967 to 1969, American police made more than 2,700,000 arrests for index crimes in cities and millions more arrests for other crimes.⁵⁶⁰ Riot arrests were a proverbial drop in the bucket of American law enforcement efforts and, as Barry Latzer has pointed out, “the overwhelming majority of American cities had no disorders.”⁵⁶¹

Feeney concludes his alternate causality argument by despairing of any possibility of analyzing his conclusion. He contends that “[i]t is difficult to estimate how long the [riots’] effects on the police lasted.”⁵⁶² And he maintains that “[a]bsent a massive, and possibly now impossible, study, it would be difficult to prove that the 1966-68 race riots and disturbances had a greater impact on police work in this period than the *Miranda* decision.”⁵⁶³ Feeney goes on to argue:

[B]efore any study could realistically claim that the *Miranda* decision was a decisive factor in any major police change in the 1966-68 period it would have to compare the *Miranda* effects with the massive amount of attention that the 1960s riots and disturbances demanded from police managers at all levels, the huge workload demands, and the impact on citizen cooperation and the environment in which the ordinary work of fighting crime took place during this period.⁵⁶⁴

Because Feeney is claiming that it is essentially impossible to disprove his argument, one can wonder if it qualifies as a serious social science effort.⁵⁶⁵ But

⁵⁵⁹ See LATZER, *supra* note 159, at 126 tbl.3.7 (citing William J. Collins & Robert A. Margo, *The Economic Aftermath of the 1960s Riots in American Cities: Evidence from Property Values*, 67 J. ECON. HIST. 849, 853 tbl.1 (2007)).

⁵⁶⁰ See UCR-1969, *supra* note 79, at 108-09, 116-17 (data for total city arrests); UCR-1968, *supra* note 79, at 108-09, 116-17 (same); UCR-1967, *supra* note 79, at 108-09, 116-17 (same).

⁵⁶¹ LATZER, *supra* note 159, at 125.

⁵⁶² Feeney, *supra* note 8, at 81.

⁵⁶³ *Id.*

⁵⁶⁴ *Id.*

⁵⁶⁵ See KARL R. POPPER, CONJECTURES AND REFUTATIONS: THE GROWTH OF SCIENTIFIC KNOWLEDGE 39 (1962) (identifying the possibility of falsification as the hallmark of a serious scientific hypothesis). Note also that Feeney described four different time periods in which

we are not so skeptical about the possibility of investigating, at least at a general level, how much effect the race riots had on American policing. Indeed, Feeney's article itself points to one possible approach. Feeney identifies as the first race riot the August 1965 Watts Riot.⁵⁶⁶ Feeney explains that "Watts exploded in August 1965, shocking the nation and making [racial] tension manifest for the first time in a major way. Hundreds were injured, 34 killed, and over 4,000 arrested."⁵⁶⁷ The Watts Riot was generally considered to be "the worst in the United States since the Detroit riot of 1943."⁵⁶⁸ So what effect did the Watts Riot have on Los Angeles clearance rates in 1965?

Inconveniently for Feeney's riots-reduce-clearances thesis, after falling for three straight years (1962-1964), Los Angeles robbery clearance rates *rose* in the year of the Watts Riot (1965)—from 32.0% to 32.8%, as shown in Figure 12 earlier.⁵⁶⁹ One would think that if riots were to have the decisive effect on ordinary policing across the country that Feeney ascribes to them, the Watts Riot would have at least had a noticeable effect on clearance rates in the specific city where it occurred in 1965.

It is possible to drill down more deeply into the Los Angeles data to see what sort of effect the Watts Riot had on day-to-day policing in Los Angeles in 1965. As Feeney mentions, the LAPD made several thousand arrests during the riots.⁵⁷⁰ Not surprisingly, these arrests show up as a spike in the LAPD statistics for 1965, which are reported on a monthly basis.⁵⁷¹ The Watts Riot took place

the race riots occurred—"1965-68," "1967-69," "1966-68," and "the 1960s."

⁵⁶⁶ Feeney, *supra* note 8, at 78 (calling the Watts Riot "just a prelude . . . to 1966").

⁵⁶⁷ *Id.*

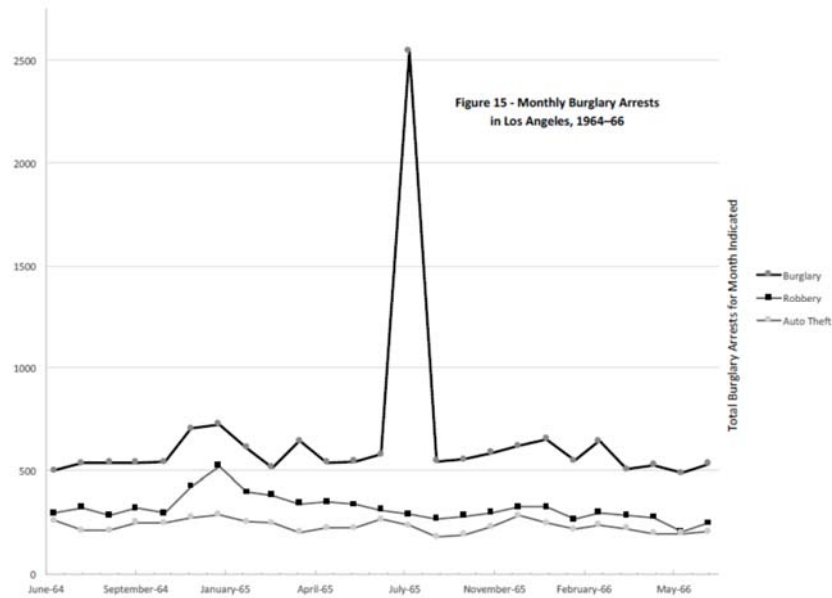
⁵⁶⁸ See NAT'L ADVISORY COMM'N ON CIVIL DISORDERS, REPORT OF THE NATIONAL ADVISORY COMMISSION ON CIVIL DISORDERS 20 (1968).

⁵⁶⁹ Compare L.A. STATISTICAL DIGEST 1965, *supra* note 349, at 10 (stating that 32.0% of robberies were cleared in 1964), with L.A. STATISTICAL DIGEST 1966, *supra* note 349, at 11 (stating that 32.8% of robberies were cleared in 1965). We focus on robbery clearance rates, *see supra* Figure 12 (depicting clearance rates for the 1960s), because those are the rates cited and discussed by Feeney, *see* Feeney, *supra* note 8, at 35-38.

⁵⁷⁰ Feeney, *supra* note 8, at 78. A few arrests were also made by the Los Angeles Sheriff's Office, the Compton Police Department, the Long Beach Police Department, and the California Highway Patrol. See BUREAU OF CRIMINAL STATISTICS, DEP'T OF JUSTICE, STATE OF CAL., WATTS RIOT ARRESTS: LOS ANGELES AUGUST 1965, at 10 tbl.1 (1966) [hereinafter WATTS ARRESTS ACCOUNTING].

⁵⁷¹ Clearance rates in Los Angeles are not reported on a monthly basis, and thus we focus our discussion on arrests as a partial substitute for these purposes. We look at total number of arrests, rather than arrest rates, because our interest here is whether police were able to continue making burglary arrests after the riots, not their overall "batting average" in solving burglaries. Because the number of burglaries was increasing during this time period, if we did look at arrest rates, we would likely see a long-term downward trend. But our interest here (on this particular subject) is not in longer-term trends but rather on any noticeable immediate effect from the riots. If the riots had no immediate effect on law enforcement, it is hard to understand how they could have had an effect at even more remote times.

from August 11 to 17, 1965.⁵⁷² Most of the arrests were for burglary or for theft.⁵⁷³ The increase in arrests during the riots is reflected in the LAPD *Statistical Digest* for burglary arrests,⁵⁷⁴ which reports that burglary arrests by LAPD spiked up dramatically in August—from 579 in July, to 2543 in August—before returning to 546 in September, 555 in October, and 587 in November.⁵⁷⁵ The number of arrests the LAPD made each month for burglary from one year before the riots to one year after can be seen in Figure 15.



As is readily apparent, burglary dramatically spiked in August 1965—the month of the Watts Riot. But, as is equally apparent, at least as far as burglary arrests in Los Angeles are concerned, things quickly return to normal. There does not appear to have been any long-term effect on burglary arrests from the Watts Riot. Indeed, researchers interested in LAPD work reported that, as of January 1966, investigations had clearly returned to normal.⁵⁷⁶

⁵⁷² See GOVERNOR'S COMM'N ON THE LOS ANGELES RIOT, REPORT: VIOLENCE IN THE CITY—AN END OR A BEGINNING? 1 (1965) [hereinafter the "McCONE COMM'N REPORT"].

⁵⁷³ See *id.* at 24 (noting 3438 adult arrests, 71% for burglary and theft; 514 juvenile arrests, 81% for burglary and theft).

⁵⁷⁴ We saw no apparent increase in arrests in August 1965 for any of the other major crime categories, not even for larceny, which was identified as an area of increased arrests during the riots. Accordingly, we focus our discussion on burglary here.

⁵⁷⁵ L.A. STATISTICAL DIGEST 1965, *supra* note 349, at 30-31 (showing number of "adult arrests" in each month of 1965).

⁵⁷⁶ Isaacs, *supra* note 392, at 88 (stating that "[t]he month of January 1966 was chosen" in

To confirm this visual conclusion more rigorously, we ran the monthly burglary arrest data through the *strucchange* algorithm used earlier in this Article.⁵⁷⁷ We found no structural break in the burglary arrest series between 1964 and 1966.⁵⁷⁸ In short, based on arrest data, it seems difficult to argue that the Watts Riot was the dominant event for Los Angeles policing in 1965, let alone for other years and other locations.

This lack of an obvious effect makes intuitive sense. Riots invariably take place in a limited space over a limited time. For example, the Watts Riot spanned “144 hours in August 1965.”⁵⁷⁹ The riot was also confined to a relatively small part of the city, South Central Los Angeles.⁵⁸⁰ While such a terrible event would be quite significant for the affected community, as an explanation for widespread changes in clearance rates detectable throughout California and beyond,⁵⁸¹ it is hard to understand the logic of the argument. Moreover, if this was the explanation for declining clearance rates in 1966 and 1967, that fact escaped the notice of the authors of the FBI’s UCR for those years, who attributed the declines to restrictive court decisions and other factors apart from riots.⁵⁸²

In an effort to explain how a riot could have exerted a long-term downward tug at crime clearance rates, Feeney offers as the explanation that “[d]uring the riot periods themselves, the police could do little else but attend to the riots.”⁵⁸³ But in Los Angeles, for example, the riot period (144 hours) was a tiny fraction of the entire year. Feeney also explains that “[a]ttempting to prosecute the [rioters] imposed significant ongoing ‘clean-up’ costs.”⁵⁸⁴ But those costs would have been largely borne by the prosecuting authorities, not the police; and, in any event, even those costs would seem to be relatively short-lived. In Los

part because “sufficient time would have elapsed after the August 1965 riots so that the data would reflect a return to normalcy”).

⁵⁷⁷ See *supra* note 306 and accompanying text (explaining the *strucchange* algorithm).

⁵⁷⁸ We also collected monthly burglary arrest data through 1969. Running the series from 1964 through 1969, we saw no structural breaks.

⁵⁷⁹ MCCONE COMM’N REPORT, *supra* note 572, at 10.

⁵⁸⁰ One measure of the geographic limitation comes from the statistic that a curfew was imposed over a 46.5-square-mile area. James Queally, *Watts Riots: Traffic Stop Was the Spark That Ignited Day of Destruction in L.A.*, L.A. TIMES (July 29, 2015), <http://www.latimes.com/local/lanow/la-me-ln-watts-riots-explainer-20150715-htmstory.html>. Presumably, this area significantly exceeded the area of actual rioting, but this large area is still only a small percentage of the total area of Los Angeles.

⁵⁸¹ See *supra* Section II.B.1.

⁵⁸² See UCR-1967, *supra* note 79, at 30 (listing the same factors as well as “an almost static ratio of police to population not commensurate with the sharp rise in crime”); UCR-1966, *supra* note 79, at 29 (“There are a number of factors influencing the decline in the police solution rate. These include court decisions which have resulted in restrictions on police investigative and enforcement practices, sharply increasing police workloads not limited to crime increases, and constantly increasing criminal mobility.”).

⁵⁸³ Feeney, *supra* note 8, at 80.

⁵⁸⁴ *Id.*

Angeles, for example, prosecution of the rioters had largely been accomplished just three months later.⁵⁸⁵ Most of those arrested either had the charges dropped or received probation or minor jail sentences.⁵⁸⁶

Feeney also speculates that a riot might have exacerbated preexisting distrust between the black community and police. But as Feeney's speculation inherently acknowledges, distrust long predated the Watts Riot⁵⁸⁷ (and, indeed, may have been one of the central causes of the riot⁵⁸⁸) and certainly continued after. This point was emphasized in 1992, for example, when a six-day riot followed the acquittal of four police officers accused of beating Rodney King.⁵⁸⁹ The exacerbated-lack-of-trust hypothesis also seems unlikely to work for some crimes. For example, vehicle theft is a crime that is generally and consistently reported to the police because of insurance requirements.⁵⁹⁰ Our *MIRANDA* effect on vehicle clearance accordingly seems unlikely to have been caused by declining citizen cooperation in black communities (or elsewhere).

For all these reasons, we do not think that riots in Watts and other areas explain the pattern of clearance rate declines that we see. But what would be ideal for comparing our views with Feeney's would be to conduct a cross-sectional analysis, comparing jurisdictions affected by riots with those which were not to see if there were declines in clearance rates. While it is not possible to do such cross-sectional analysis on the nationally imposed *Miranda* rules,⁵⁹¹

⁵⁸⁵ For example, the McCone Commission Report indicated that, as of November 1965, just three months after the arrests, most of the riot-related criminal cases had already been disposed of. MCCONE COMM'N REPORT, *supra* note 572, at 25. Virtually all cases had been resolved by the following year. *See* WATTS ARRESTS ACCOUNTING, *supra* note 570, at 6-7 (stating that as of June 1966, of an initial total of about 4000 arrests, only 106 adult cases "were still pending" and that "[f]or the most part" these were simply cases in which the defendant had "absconded" and a bench warrant was pending).

⁵⁸⁶ *See* WATTS ARRESTS ACCOUNTING, *supra* note 570, at 11-12, 15 tbl.2.

⁵⁸⁷ *See* ERROL WAYNE STEVENS, *RADICAL L.A.: FROM COXEY'S ARMY TO THE WATTS RIOTS, 1894-1965*, at 315 (2009) (discussing minority-community concerns about police brutality in 1961).

⁵⁸⁸ *See* MCCONE COMM'N REPORT, *supra* note 572, at 12-13.

⁵⁸⁹ *See* INDEP. COMM'N ON THE L.A. POLICE DEP'T, REPORT, at vii (1991).

⁵⁹⁰ *See* CAROLINE WOLF HARLOW, DEP'T OF JUSTICE, SPECIAL REPORT: MOTOR VEHICLE THEFT 4 tbl.10 (1988) (stating that 87% of completed vehicle thefts were reported to the police, as were 36% of attempted thefts and 68% of completed and attempted thefts combined); Dale O. Cloninger & Lester C. Sartorius, *Crime Rates, Clearance Rates and Enforcement Effort: The Case of Houston, Texas*, 38 AM. J. ECON. & SOC. 389, 392 (1979) ("[A]uto theft . . . showed no appreciable reporting errors in national surveys."); Samuel Nunn, *Computers in the Cop Car: Impact of the Mobile Digital Terminal Technology on Motor Vehicle Theft Clearance and Recovery Rates in a Texas City*, 17 EVALUATION REV. 182, 187 (1993) ("[U]nlike burglary, robbery, and assaults, for example, that are subject to both the uncertainty of reporting and nonreporting by victims and changes in the definition of the crimes, motor vehicle thefts are generally reported and are not particularly subject to changes in definition.").

⁵⁹¹ *See supra* notes 131-33 and accompanying text.

the riots are a different story. As Feeney himself appears to acknowledge,⁵⁹² the late 1960s riots affected America's largest cities, "including all but one of the 50 largest cities and all but nine of the 100 largest cities."⁵⁹³ But the late 1960s riots were an urban phenomenon that did not occur in, for example, rural areas.⁵⁹⁴ So if Feeney's theory is correct, the *MIRANDA* effect should appear in urban areas but not rural areas. And yet, as discussed earlier, our *MIRANDA* effect appears not only in the clearance rates of large cities but also in, for example, the nation's small cities (populations between 10,000 and 20,000), very small cities (populations below 10,000), suburban areas, and even rural areas.⁵⁹⁵ Feeney's riot theory is, obviously, an extremely poor candidate for explaining simultaneous clearance rate declines in 1966 to 1968 among hundreds of rural law enforcement agencies.

2. Increasing Heroin Use

Apart from the riots, the other factor that Feeney cites as a potential confounding alternate causality is increasing use of heroin, which he characterizes as the "late 1960s heroin epidemic."⁵⁹⁶ Feeney argues that heroin users often finance their drug habits, in part, through various crimes and that a surge in heroin-induced crimes could have caused the declining clearance rates that we observed.⁵⁹⁷

In our earlier article, we considered the possibility that Feeney raises. We explained that if drug use increased dramatically uniquely around the time of *Miranda*, and if this led to a significant increase in crimes, and if drug-related crimes are harder to clear, then perhaps drug usage could have caused the clearance rate drops.⁵⁹⁸ But we thought each of these links was questionable.

The timing of increased illegal drug usage does not quite fit the 1966-to-1968 drop, because the use of illegal drugs appears to have increased from the early

⁵⁹² See Feeney, *supra* note 8, at 77.

⁵⁹³ *Id.* (citing JANE A. BASKIN ET AL., LEMBERG CTR. FOR THE STUDY OF VIOLENCE, RACE RELATED CIVIL DISORDERS: 1967-1969, at 3, 9, 20 (1971)).

⁵⁹⁴ See NAT'L ADVISORY COMM'N ON CIVIL DISORDERS, *supra* note 568, at 1 (reporting on "racial disorders" in "American cities"); *id.* at 66 (quantifying city size where disorders occurred).

⁵⁹⁵ See *supra* notes 318-28 and accompanying text.

⁵⁹⁶ Feeney, *supra* note 8, at 81.

⁵⁹⁷ See *id.* at 81-82 ("There is . . . wide acceptance of the idea that heroin users often finance their own habits through the sale of drugs to others and by thefts, including robberies and burglaries.").

⁵⁹⁸ Cassell & Fowles, *supra* note 5, at 1114.

1960s⁵⁹⁹ (if not earlier⁶⁰⁰) through at least the 1970s and 1980s.⁶⁰¹ The available Department of Justice data show sharply increasing arrests from 1965 (the first year for which comparable data are available) to 1974, then a leveling off, then another sharp rise from 1980 to 1989.⁶⁰² The data thus do not suggest a unique, sharp 1966-to-1968 change in drug usage that would explain the clearance rate change during the same time.

In response to these points, Feeney quibbles that our national data “focus on drugs in general rather than on heroin—the drug with the closest connection to,” he argues, the crimes in question (such as larceny and burglary).⁶⁰³ This might be an effective argument if Feeney had data showing a different pattern in heroin arrests than from overall drug arrests, from which one might ascribe a different pattern to the heroin epidemic. But Feeney presents no such data. Data about the extent to which a particular drug is used is notoriously hard to obtain, and “even from an historical perspective it is difficult to identify with precision when the sharp upward trend [in hard narcotics] began.”⁶⁰⁴ Some scholars have even claimed that there was no heroin “epidemic” around that time.⁶⁰⁵ And, of course, increases in illegal drug usage were hardly confined to the late 1960s, as the crack cocaine “epidemic” of the late 1980s attests.⁶⁰⁶

⁵⁹⁹ See RICHARD ASHLEY, *HEROIN: THE MYTHS AND THE FACTS* 43 (1972) (quoting Myles J. Ambrose of Office for Drug Abuse Law Enforcement as saying that heroin/drug use exploded beginning “around 1962-63”).

⁶⁰⁰ See GEOFFREY PEARSON, *THE NEW HEROIN USERS* 1 (1987) (“North American cities such as Chicago and New York experienced their initial heroin epidemics . . . in the late 1940s and early 1950s . . .”).

⁶⁰¹ Cassell & Fowles, *supra* note 5, at 1114 (citing STEVEN B. DUKE & ALBERT C. GROSS, *AMERICA’S LONGEST WAR: RETHINKING OUR TRAGIC CRUSADE AGAINST DRUGS* 100-02 (1993)) (“Use of illegal drugs appears to have increased from the early 1960s through the 1970s and 1980s.”); see also Robert L. DuPont, *Profile of a Heroin-Addiction Epidemic*, 285 *NEW ENG. J. MED.* 320, 320 (1971) (observing that the heroin-addiction epidemic in Washington, D.C. appeared to be accelerating in 1970); Janet Reno, Attorney Gen., Keynote Address at the Drug Enforcement Administration National Heroin Conference 6-7 (Feb. 5, 1997), http://www.usdoj.gov/archive/ag/speeches/1997/0205_ag.dea.html [<https://perma.cc/C7CF-9M4P>] (discussing increased heroin addiction in 1997).

⁶⁰² Cassell & Fowles, *supra* note 5, at 1114 (citing BUREAU OF JUSTICE STATISTICS, *supra* note 554, at 413 tbl.4.33 (reprinting an FBI compilation of 1993 UCR data)).

⁶⁰³ Feeney, *supra* note 8, at 82-83.

⁶⁰⁴ WILSON, *supra* note 545, at 33-34.

⁶⁰⁵ See CHARLES E. SILBERMAN, *CRIMINAL VIOLENCE, CRIMINAL JUSTICE* 175-76 (1978) (“[T]he ‘alarming trend’ of increased addiction . . . was the product of a politically induced change in the statistical procedures used by the Federal Bureau of Narcotics and Dangerous Drugs (BNDD) to estimate the number of addicts, not of any sudden jump in heroin use.”). See generally EDWARD JAY EPSTEIN, *AGENCY OF FEAR: OPIATES AND POLITICAL POWER IN AMERICA* (1977) (discussing “the inner workings of the ‘war on heroin’”).

⁶⁰⁶ LATZER, *supra* note 159, at 175-82.

In an effort to provide some statistical support for his argument, Feeney drops a footnote asserting that “[t]here was a tremendous surge in California in 1966-68 in opiate arrests.”⁶⁰⁷ Feeney then asserts that “opiate arrests” in California increased 5% (1965 to 1966), 31% (1966 to 1967), and 33% (1967 to 1968)—but he fails to provide any source supporting his asserted figures.⁶⁰⁸ In attempting to verify his assertion, we could find no such reported California data for those years. We did find that the annual crime reports for California during that time do not report a separate category of offense for “opiate arrests” but rather only aggregate data for “[d]rug law violations”⁶⁰⁹—the much broader category of arrests that Feeney criticized us for using. Perhaps more important, the California data for all drug law violations confirms our argument that there was no unique surge in drug arrests during the 1966-to-1968 period that would match the timing of our clearance rate decline.⁶¹⁰

The only specific California data about heroin arrests during that time that we have been able to locate appear in California’s 1972 and 1973 annual crime reports. But contrary to Feeney’s suggestion that California heroin usage surged in 1966 to 1968, the surge seems to have occurred later. California’s 1972 *Crime and Delinquency* report says that “[o]ne of the more sobering changes seen in drug arrests is the nearly two-thirds increase in arrests for heroin offenses over the five years” 1968 to 1972.⁶¹¹ A line graph accompanying that assertion shows an approximate annual percentage increase from 1968 to 1969 of 3%, from 1969 to 1970 of 12%, from 1970 to 1971 of 13%, and from 1971 to 1972 of 26%.⁶¹² The fact that heroin arrests continued rising well after the 1966-to-1968 clearance rate declines, even in the one state Feeney has hand-selected for special analysis, undercuts his argument substantially.

In addition, even if there had been a sharp surge in drug usage during this limited period, the connection between drug use and crime is unclear.⁶¹³

⁶⁰⁷ Feeney, *supra* note 8, at 83 n.265.

⁶⁰⁸ *Id.*

⁶⁰⁹ BUREAU OF CRIMINAL STATISTICS, DEP’T OF JUSTICE, STATE OF CAL., CRIME AND DELINQUENCY IN CALIFORNIA: 1968, at 71 tbl.III-1 (1969). The table for misdemeanors likewise does not break out separate drug categories. *Id.* at 82 tbl.III-8.

⁶¹⁰ According to the annual reports from *Crime and Delinquency in California*, adult felony drug arrests rose sharply from (at least) 1964 to 1972. Specifically, from 1960 to 1965 adult drug arrests fell slightly from 14,152 to 12,874, BUREAU OF CRIMINAL STATISTICS, *supra* note 335, at 221; in 1966 and 1967 the number of arrests spiked to 19,403 and then 33,360, BUREAU OF CRIMINAL STATISTICS, *supra* note 609, at 71 tbl.III-1; and from 1968 to 1973 the number of arrests rose further from 49,274 to 96,733.

⁶¹¹ BUREAU OF CRIMINAL STATISTICS, DEP’T OF JUSTICE, STATE OF CAL., CRIME AND DELINQUENCY IN CALIFORNIA 30 (1972).

⁶¹² *Id.* at 30; *see also id.* at 33 tbl.6.

⁶¹³ *See, e.g.,* JOHN KAPLAN, THE HARDEST DRUG: HEROIN AND PUBLIC POLICY 57 (1983) (stating that experts cannot “relate the contribution of heroin addiction to the total volume of property crime in the United States—except to say that it is far less than the popular literature has portrayed”); *cf. Trevor Bennett, Katy Holloway & David Farrington, The Statistical*

Feeney's argument rests on the assumption that heroin-induced crimes increased at exactly the same time as the Court decided *Miranda*. But even if we assume that such crimes grew, Feeney's argument still needs to develop a unique heroin link to the particular clearance rate changes we are trying to explain. Our equations find *MIRANDA*-induced declines in clearance rates for, in particular, the crimes of robbery, larceny, vehicle theft, and perhaps burglary.⁶¹⁴ But the conventional argument that we have seen in the literature suggests a connection between heroin use and the specific crimes of drug dealing or larceny.⁶¹⁵ One of our property crime categories where *Miranda* has a particularly strong effect is vehicle theft. We have not seen any special connection suggested between heroin use and vehicle theft.

Turning to the declining clearance rates for robbery that are of special interest to us and Feeney—and on which *Miranda* may have had a particularly strong impact—there is considerable reason for doubting a strong connection between heroin addiction and robbery in the 1960s.⁶¹⁶ One observational study from around that time found that only a tiny fraction of heroin users' income came from robberies or other violent encounters with others.⁶¹⁷ Even adjusting for the fact that certain criminal heroin users were less likely to be detected in an observational study, violent crimes were a relatively small percentage of the way in which heroin users financed their habit.⁶¹⁸ Another study found that violent felonies were only a tiny fraction of heroin addicts' criminal histories, both pre-addiction and post-addiction; only two percent of the criminal charges faced by addicts in the year before entering methadone treatment were violent crimes.⁶¹⁹

Feeney's blame-it-on-heroin argument suffers still further difficulties. As we noted in our earlier article, our regression equations already control for the

Association Between Drug Misuse and Crime: A Meta-Analysis, 13 AGGRESSION & VIOLENT BEHAV. 107, 117 (2008) (collecting available empirical evidence on linkage between all forms of drug misuse and various forms of crime and finding "that the odds of offending were between 2.8 and 3.8 times greater for drug users than non-drug users").

⁶¹⁴ See *supra* Section II.D (describing effects of the *MIRANDA* variable).

⁶¹⁵ See, e.g., Michael Alexander & Catherine McCaslin, *Criminality in Heroin Addicts Before, During, and After Methadone Treatment*, 64 AM. J. PUB. HEALTH 51, 52 (1974) (finding heroin addicts most often had criminal records of minor crimes, property felonies, drug felonies, and thefts); cf. Max Singer, *The Vitality of Mythical Numbers*, 23 PUB. INT. 3, 6 (1971) (discussing inflated estimates of alleged property crimes committed by heroin users).

⁶¹⁶ See Robert Nash Parker & Kathleen Auerhahn, *Alcohol, Drugs, and Violence*, 24 ANN. REV. SOC. 291, 295 (1998) ("Evidence to support a link between heroin and violence is virtually nonexistent.").

⁶¹⁷ MARK HARRISON MOORE, *BUY AND BUST: THE EFFECTIVE REGULATION OF AN ILLICIT MARKET IN HEROIN* 88 tbl.2-9 (1977) (finding that 1.1% of heroin users' income came from "[t]hefts [i]nvolving [e]ncounters with [i]ndividuals," including "robbery, mugging, and preying on dealers").

⁶¹⁸ *Id.* at 89 tbl.2-10 (finding that seven percent of heroin users' income came from "[t]hefts [i]nvolving [v]iolent [e]ncounters with [o]thers").

⁶¹⁹ Alexander & McCaslin, *supra* note 615, at 53 fig.1.

number of crimes committed.⁶²⁰ Thus, for drug usage to be the confounding omitted variable, drug-related crimes would need not only to have increased around the time of *Miranda*, but also to have been uniquely hard to clear. Yet Feeney offers no reason to suspect that, for example, a heroin-induced robbery would be harder to solve than other robberies. Instead, Feeney attempts to flip the burden of proof around, arguing that we are the ones who claim “without the benefit of any facts, that heroin-induced robberies are as easy to clear as all other kinds of robberies.”⁶²¹ As we explained above, during the pivotal 1966-to-1968 period, the contemporaneous law enforcement assessment of reasons for declining clearance rates included restrictive court decisions and other factors accounted for by our equations—not any rise in heroin consumption. Given that contemporaneous assessment, the burden of persuasion can properly be assigned to someone who, like Feeney, is now proposing—decades later—a heretofore unrecognized explanation for the declining clearance rates in 1966 to 1968.

In any event, looking at the available empirical evidence, good reason exists for thinking that heroin-induced crimes are no more difficult to solve than other crimes. Contrary to Feeney’s underlying premise that heroin use causes crime, in fact causality may well run the other way.⁶²² This point has been most carefully articulated by John Kaplan—a source cited by Feeney for the argument that there is “wide acceptance of the idea that heroin users often finance their own habits through the sale of drugs to others and by thefts, including robberies and burglaries.”⁶²³ But as Kaplan makes clear in his book, things are not so simple:

On the other hand, . . . one can make a strong argument that heroin use is not a major factor in turning addicts into criminals. The alternative explanation is that criminality causes heroin addiction instead of the other way around, or, more precisely, that both heroin addiction and criminality are caused by the same thing.⁶²⁴

Kaplan goes on to explain that “[v]irtually every study of the onset of addiction shows that, on the average, the addict’s first arrest precedes his first use of heroin by about one-and-a-half years.”⁶²⁵ In other words, heroin use is

⁶²⁰ Cassell & Fowles, *supra* note 5, at 1114.

⁶²¹ Feeney, *supra* note 8, at 83.

⁶²² See, e.g., Bruce L. Benson et al., *Is Property Crime Caused by Drug Use or by Drug Enforcement Policy?*, 24 *APPLIED ECON.* 679, 690 (1992) (concluding after empirical study that “even for those drug users who do commit property crimes, causation could easily be running from crime to drugs”).

⁶²³ Feeney, *supra* note 8, at 81-82 (first citing KAPLAN, *supra* note 613, at 51-58; then citing MOORE, *supra* note 617, at 67-115).

⁶²⁴ KAPLAN, *supra* note 613, at 54.

⁶²⁵ *Id.* at 54-55 (citing C. Jack Friedman & Alfred S. Friedman, *Drug Abuse and Delinquency*, in 1 *DRUG USE IN AMERICA: PROBLEM IN PERSPECTIVE*, app., 398, 409 (1973)).

often something of a status symbol for criminals—not something that drives them to criminality.⁶²⁶

Many studies support Kaplan's argument that criminality often precedes heroin use.⁶²⁷ After beginning drug use, an addict is likely to commit fewer violent crimes and more property crimes.⁶²⁸ The most common type of crime committed by heroin addicts is theft, with the second most common crime being the selling of drugs.⁶²⁹

[A] clear majority of the crimes by male heroin users [are] crimes without victims: Almost 60 percent of the criminal behavior reported . . . [are] drug sales, prostitution, gambling, and alcohol offenses, with an additional 8.1 percent of criminal activity involving the buying, selling, or receiving of stolen goods—a secondary level of criminality resulting, in most instances, from the users' initial involvement in property crimes.⁶³⁰

The finding that criminal activity rapidly increases when drug users become dependent can be explained other than by the drugs-cause-crime model.⁶³¹

⁶²⁶ See Theodore Dalrymple, *Myths and Realities of Drug Addiction, Consumption, and Crime*, LIBR. L. & LIBERTY (July 31, 2015), <http://www.libertylawsite.org/2015/07/31/myths-and-realities-of-drug-addiction-consumption-and-crime/> [https://perma.cc/XB8V-BT5H] (“Whatever the connection between crime and addiction, it is not that addiction causes crime.”).

⁶²⁷ See John C. Ball et al., *The Criminality of Heroin Addicts: When Addicted and When Off Opiates*, in THE DRUGS-CRIME CONNECTION 39, 40 (James A. Inciardi ed., 1981) (analyzing the sequence of crime and heroin use, and discussing a study finding that “71 percent of heroin users . . . had a delinquency record prior to onset of their opiate use”); James A. Inciardi, *Heroin Use and Street Crime*, 25 CRIME & DELINQ. 335, 335-36 (1979) (“Some researchers have found that the criminal histories of their sample cases considerably preceded any evidence of drug use”); William H. McGlothlin, M. Douglas Anglin & Bruce D. Wilson, *Narcotic Addiction and Crime*, 16 CRIMINOLOGY 293, 294 (1978) (“[N]umerous studies have found that the majority of addicts are involved in crime prior to addiction”); Scott Menard, Sharon Mihalic & David Huizinga, *Drugs and Crime Revisited*, 18 JUST. Q. 269, 269, 274 (2001) (“[R]esearch results indicate that initiation of crime typically precedes initiation of drug use”).

⁶²⁸ See Duane C. McBride, *Drugs and Violence*, in THE DRUGS-CRIME CONNECTION, *supra* note 627, at 105, 119-20 (“[T]he relationship between drug use and property crime occurs because of the monetary cost of drug use and the need to commit property crimes that produce the funds necessary to obtain drugs.”).

⁶²⁹ Ball et al., *supra* note 627, at 51 (studying the criminal actions of Baltimore opiate addicts).

⁶³⁰ Inciardi, *supra* note 627, at 341; see also James A. Inciardi & Carl D. Chambers, *Unreported Criminal Involvement of Narcotic Addicts*, J. DRUG ISSUES, Spring 1972, at 57, 59, 60 tbl.1 (describing the “predominance of direct acquisitive property crime as characteristic of [addicts'] criminal behavior” and self-reports reflecting that ninety-three percent of crimes were property crimes).

⁶³¹ See Toby Seddon, *Explaining the Drug-Crime Link: Theoretical, Policy and Research Issues*, 29 J. SOC. POL'Y 95, 97 (2000).

“[L]evels of drug use are often . . . determined week-to-week by success in crime (and the resulting money available) rather than [the addict’s] physical need.”⁶³² That is to say, “periods of criminal success are accompanied by a more extravagant lifestyle in which increased drug consumption is one part.”⁶³³ As a result, “day-to-day, crime [may be] a better explanation of drug use than drug use [is] of crime.”⁶³⁴ If all this is true, it offers little reason for thinking that heroin-induced crimes are uniquely hard to solve.

One last and fatal problem with Feeney’s blame-it-on-heroin thesis is the fact that clearance rate declines in 1966 to 1968 were experienced not only in major urban areas, but also suburban and rural areas.⁶³⁵ Yet heroin abuse in the 1960s was commonly understood to be a predominantly urban problem, particularly in the largest cities such as New York.⁶³⁶ For example, Barry Latzer recently looked back at crime trends in the 1960s and reported that “[w]hile the authorities were unsuccessful in controlling heroin, sale and use was localized in a few big cities within poor black and Hispanic neighborhoods.”⁶³⁷ We have not seen any evidence of a suddenly developing heroin “epidemic” in, for example, suburban and rural America in 1966 to 1968. And yet we find evidence of *MIRANDA* effects in these very areas⁶³⁸—something for which Feeney’s argument cannot account.

For all these reasons, Feeney’s argument about heroin as an alternative causality is unpersuasive. And a larger point should be made about that unpersuasiveness. Feeney has obviously labored long and hard to canvas all of the criminal justice literature to find an explanation for the late 1960s clearance rate declines. Because his leading suspects (riots and heroin) so clearly fail, the correlative case for our suspect (*Miranda*) strengthens considerably.

C. Other Supreme Court Decisions Apart from *Miranda*

Because we are looking for something that caused a nationwide decline in crime clearance rates, it is also worth considering the possibility that other Supreme Court decisions apart from *Miranda* are responsible. Although police

⁶³² *Id.* (citation omitted).

⁶³³ *Id.*

⁶³⁴ *Id.* (quoting Richard Hammersley et al., *The Relationship Between Crime and Opioid Use*, 84 BRITISH J. ADDICTION 1029, 1040 (1989)).

⁶³⁵ See *supra* Table 11 (showing effect of the *MIRANDA* variable on suburban and rural areas).

⁶³⁶ See ASHLEY, *supra* note 599, at 47-48 (noting that it was “commonly asserted that one-half of the heroin users in America live in New York City,” although questioning the factual grounding for this assertion); MOORE, *supra* note 617, at 67 (“New York City accounts for a reasonably large fraction of the total volume of heroin distributed in the United States.”).

⁶³⁷ LATZER, *supra* note 159, at 91.

⁶³⁸ See *supra* Table 11 (showing the *MIRANDA* variable’s effect on suburban and rural areas).

contemporaneously identified *Miranda* as a major obstacle,⁶³⁹ defenders of *Miranda* might argue that it is impossible to single out *Miranda* as the most harmful decision among the Warren Court's various rulings.⁶⁴⁰ This argument suggests that the *MIRANDA* variable is more properly denominated a "Warren Court" variable, given the various Warren Court restrictions on the police.⁶⁴¹ Even if this assertion were true, our findings would still be of some importance, as legal academics have generally denied that the Warren Court decisions impeded law enforcement.⁶⁴² Nonetheless, there are strong reasons for believing that *Miranda* was the Warren Court decision primarily—although perhaps not exclusively—responsible for declining clearance rates in 1966 to 1968.

Other Court decisions from the same time seem unlikely to have had as much effect on clearance rates.⁶⁴³ Isaac Ehrlich and George Brower have cataloged the "significant" Warren Court decisions that possibly affected law enforcement.⁶⁴⁴ In the critical 1966-to-1968 period, they identify, in addition to *Miranda*, two other Court decisions. The first, *United States v. Wade*,⁶⁴⁵ is one of several "lineup" cases decided by the Court in 1967 that suggested that the right to counsel extended to such proceedings.⁶⁴⁶ But lineups are probably implicated in a small percentage of cases overall, certainly a much smaller percentage than interrogation. Police also had fairly simple ways of circumventing the lineup rulings.⁶⁴⁷ Moreover, the Court cut back on the applicability of the doctrine in 1972,⁶⁴⁸ with the result that it is now "largely ineffectual."⁶⁴⁹ Therefore, if the

⁶³⁹ See *supra* Section VI.A (describing law enforcement's response to the *Miranda* decision).

⁶⁴⁰ See Schulhofer, *Bashing Miranda*, *supra* note 125, at 369-70 (suggesting that other Warren Court rulings should be taken into account).

⁶⁴¹ See generally Shima Baradaran, *Restoring the Presumption of Innocence*, 72 OHIO ST. L.J. 723 (2011).

⁶⁴² See, e.g., Kamisar, *supra* note 164, at 245-57 (denying that the Warren Court decisions were responsible for sinking clearance rates in the 1960s).

⁶⁴³ Cf. Yale Kamisar, *The Warren Court and Criminal Justice: A Quarter-Century Retrospective*, 31 TULSA L.J. 1, 1 (1995) (questioning whether the Warren Court generally shifted rules in favor of the defense); Yale Kamisar, *The Warren Court (Was It Really So Defense-Minded?)*, *the Burger Court (Is It Really So Prosecution-Oriented?)*, and *Police Investigatory Practices*, in *THE BURGER COURT: THE COUNTER-REVOLUTION THAT WASN'T* 62, 63 (Vincent Blasi ed., 1983) (same).

⁶⁴⁴ See Ehrlich & Brower, *supra* note 97, at 103 tbl.2.

⁶⁴⁵ 388 U.S. 218 (1967).

⁶⁴⁶ See *Stovall v. Denno*, 388 U.S. 293, 296 (1967); *Gilbert v. California*, 388 U.S. 263, 272 (1967); *Wade*, 388 U.S. at 236-37.

⁶⁴⁷ See Donald Dripps, *The Case for the Contingent Exclusionary Rule*, 38 AM. CRIM. L. REV. 1, 39 (2001).

⁶⁴⁸ See *Kirby v. Illinois*, 406 U.S. 682, 690-91 (1972) (refusing to extend counsel requirements to lineup cases where "a person has not been formally charged with a criminal offense").

⁶⁴⁹ 1 JOSHUA DRESSLER & ALAN C. MICHAELS, *UNDERSTANDING CRIMINAL PROCEDURE*

lineup decisions were responsible for the drop in clearance rates, those rates should have later rebounded. Such a rebound does not exist.⁶⁵⁰ The other significant case identified by Ehrlich and Brower is *Katz v. United States*,⁶⁵¹ which involved the unusual investigative technique of placing an electronic listening device on a telephone booth used frequently by a suspect.⁶⁵² Although the decision is doctrinally important because of its famous suggestion that “the Fourth Amendment protects people, not places,”⁶⁵³ its effect on day-to-day police operations was probably relatively small; the Court specifically concluded that the law enforcement agents could have done exactly the same thing, provided they obtained a warrant first.⁶⁵⁴ Other potentially important cases during the 1966-to-1968 time period did not restrict police investigations, but rather court adjudicatory processes—which begin only after a crime has been cleared.⁶⁵⁵ None of these others decisions (far less famous and presumably less impactful than *Miranda*, in any event) could have had much effect on police clearance rates.

Nor do earlier decisions seem likely to have affected clearance rates during the 1966-to-1968 period.⁶⁵⁶ Stephen Schulhofer has cited the Court’s decisions in *Mapp v. Ohio*⁶⁵⁷ and *Gideon v. Wainwright*⁶⁵⁸ as possible competing impediments to law enforcement.⁶⁵⁹ But the timing of these rulings makes them implausible candidates to explain the immediate post-*Miranda* clearance rate drop. *Mapp* was decided in 1961 and *Gideon* in 1963. It seems improbable that they could explain, for example, the sudden changes in robbery clearance rates that appeared in 1966 to 1968, but not earlier.⁶⁶⁰ *Mapp*’s main effects, if any,⁶⁶¹

§ 26.02[B][2] (6th ed. 2013).

⁶⁵⁰ See *supra* Figures 2-7 (displaying no noticeable rise in clearance rates in 1973 and 1974).

⁶⁵¹ 389 U.S. 347 (1967).

⁶⁵² *Id.* at 348.

⁶⁵³ *Id.* at 351.

⁶⁵⁴ See *id.* at 354.

⁶⁵⁵ See, e.g., *In re Gault*, 387 U.S. 1, 12, 59 (1967) (applying due process requirements to determine “the constitutional validity of” juvenile delinquency proceeding); *Chapman v. California*, 386 U.S. 18, 25-26 (1967) (finding a constitutional violation when the prosecutor commented on the defendant’s assertion of right to silence).

⁶⁵⁶ But cf. *Kamisar*, *supra* note 164, at 242 n.5 (concluding that the Warren Court decisions “caused relatively little furor until applied to the ‘police practice’ phases of the criminal process in the late 1960’s”).

⁶⁵⁷ 367 U.S. 643, 655-56 (1961) (excluding evidence in a state criminal trial that was the result of an illegal search).

⁶⁵⁸ 372 U.S. 335, 343-45 (1963) (establishing a right to counsel for indigent defendants).

⁶⁵⁹ See Schulhofer, *supra* note 21, at 512-13.

⁶⁶⁰ Note that robbery clearance rates changed little from 1962 to 1965, even rising slightly from 1964 to 1965. See *supra* Figure 5.

⁶⁶¹ See Tonja Jacobi, *The Law and Economics of the Exclusionary Rule*, 87 NOTRE DAME L. REV. 585, 592-617 (2011) (raising questions about whether the exclusionary rule affects

were probably felt in the early 1960s.⁶⁶² It is hard to understand why *Mapp* would cause clearance rates to begin falling at an accelerated pace some five to seven years after the decision. Also, *Gideon* is a particularly poor candidate to influence clearance rates because it dealt not with police investigations but with later court adjudications.

Nor are the Court's decisions on vagrancy and related issues plausible candidates for explaining 1966-to-1968 changes in clearance rates. William Stuntz has explained how police once had rather substantial authority to stop and arrest persons on loitering, vagrancy, and related grounds⁶⁶³—authority that is now restricted.⁶⁶⁴ Although this declining authority to arrest might result in declining opportunities for interrogation and hence confessions, the timing does not fit the drop we are interested in explaining. The leading case striking down vagrancy laws is *Papachristou v. Jacksonville*,⁶⁶⁵ decided in 1972. Also, arrest rates for vagrancy, "suspicion," disorderly conduct, and drunkenness declined over a much longer time period, from well before *Miranda* to well after,⁶⁶⁶ without sharp changes in the late 1960s.⁶⁶⁷ Finally, restrictions on police arrests

police behavior); Oaks, *supra* note 127, at 755 (arguing that "the exclusionary rule is a failure" in terms of "detering illegal searches and seizures by the police"); cf. Paul G. Cassell, *The Mysterious Creation of Search and Seizure Exclusionary Rules Under State Constitutions: The Utah Example*, 1993 UTAH L. REV. 751, 842-46 (collecting evidence that state exclusionary rules are unlikely to have an incremental deterrent effect beyond the federal rules). The Court's later decision in *United States v. Leon*, 468 U.S. 897, 922-25 (1984), may also have had a minimal effect on police practices, see CRAIG D. UCHIDA ET AL., *THE EFFECTS OF UNITED STATES V. LEON ON POLICE SEARCH WARRANT PRACTICES*, 1984-1985 (1987).

⁶⁶² See Atkins & Rubin, *supra* note 134, at 166 (finding *Mapp* had an effect on crime rates starting in 1961); Stuart S. Nagel, *Testing the Effects of Excluding Illegally Seized Evidence*, 1965 WIS. L. REV. 283, 285-88 (finding changes in police search and seizure practices due to the exclusionary rule from 1960 to 1963); cf. Bradley C. Canon, *Is the Exclusionary Rule in Failing Health? Some New Data and a Plea Against a Precipitous Conclusion*, 62 KY. L.J. 681, 711-16 (1974) (arguing that the Supreme Court's refinement of the exclusionary rule in its 1969 decision *Chimel v. California*, 395 U.S. 752 (1969), produced an increase in use of search warrants from 1968 to 1973).

⁶⁶³ See William J. Stuntz, *Implicit Bargains, Government Power, and the Fourth Amendment*, 44 STAN. L. REV. 553, 559 (1992) (stating that, prior to the late 1960s, "the police could, and did, keep public areas 'clean' by stopping or arresting whomever they wished").

⁶⁶⁴ See Robert C. Ellickson, *Controlling Chronic Misconduct in City Spaces: Of Panhandlers, Skid Rows, and Public-Space Zoning*, 105 YALE L.J. 1165, 1209-14 (1996) (detailing court decisions in the 1960s and 1970s that struck down regulations permitting arrest for minor forms of public disobedience).

⁶⁶⁵ 405 U.S. 156, 171 (1972).

⁶⁶⁶ RISA GOLUBOFF, *VAGRANT NATION: POLICE POWER, CONSTITUTIONAL CHANGE, AND THE MAKING OF THE 1960S*, 186-88 (2016) (noting vagrancy laws actually continued past the 1960s).

⁶⁶⁷ See Cassell & Fowles, *supra* note 5, at 1113 & n.273. For example, arrest rates for vagrancy per 100,000 inhabitants went from 140.8 in 1960, to 89.8 in 1965, to 66.7 in 1970, and to 33.1 in 1975. See *id.*

for vagrancy would only indirectly affect clearance for index crimes, such as robbery.

In sum, *Miranda* appears to be the Supreme Court decision most likely to have caused declining clearance rates in 1966 to 1968.

D. *The Implausibility of Declining Coercion as an Explanation*

Readers who agree with us that *Miranda* caused clearance rate declines might be tempted at this point to respond along the lines of: “Of course—*Miranda* stopped the police from beating suspects up to get confession, so naturally clearance rates declined.” On this view, declining clearance rates measure not the social cost of criminals unfairly escaping, but rather the social benefit of police abandoning impermissible questioning techniques. Note that this argument would implicitly concede that clearance rates did fall because of *Miranda*. However, this explanation of why *Miranda* produced the drop is far-fetched for several reasons.

First, genuinely coerced confessions were statistically rare at the time of *Miranda*.⁶⁶⁸ Of course, one cannot consult an FBI tally of the number of coerced confessions each year. Yet it appears to be common ground that, as the result of increasing judicial oversight and police professionalization, coercive questioning methods began to decline in the 1930s and 1940s.⁶⁶⁹ By the 1950s, coercive questioning had “diminished considerably,”⁶⁷⁰ because police viewed such techniques as unnecessary and harmful to their image.⁶⁷¹ By the time of *Miranda*, the President’s Commission on Law Enforcement and the Administration of Justice reported that “today the third degree is almost nonexistent” and referred to “its virtual abandonment by the police.”⁶⁷² Thus, the Supreme Court’s decision curtailing police interrogation techniques addressed a problem “that was already fading into the past.”⁶⁷³ Chief Justice Warren’s majority opinion in *Miranda*, though noting historical police abuses, acknowledged that such abuses are “undoubtedly the exception now” and that “the modern practice of in-custody interrogation is psychologically rather than

⁶⁶⁸ To be clear, we strongly condemn even isolated instances of coerced confessions.

⁶⁶⁹ Cassell, *supra* note 16, at 473-75; Richard A. Leo, *From Coercion to Deception: The Changing Nature of Police Interrogation in America*, 18 CRIME L. & SOC. CHANGE 35, 47-53 (1992).

⁶⁷⁰ Leo, *supra* note 669, at 51.

⁶⁷¹ GEORGE C. THOMAS III & RICHARD A. LEO, CONFESSIONS OF GUILT: FROM TORTURE TO *MIRANDA* AND BEYOND 139 (2012).

⁶⁷² PRESIDENT’S COMM’N ON LAW ENF’T & ADMIN. OF JUSTICE, THE CHALLENGE OF CRIME IN A FREE SOCIETY 93 (1967), <https://www.ncjrs.gov/pdffiles1/nlj/42.pdf> [<https://perma.cc/J6JE-77EH>] (discussing pre-*Miranda* data).

⁶⁷³ FRED P. GRAHAM, THE SELF-INFLECTED WOUND 22 (1969).

physically oriented.”⁶⁷⁴ Furthermore, empirical surveys⁶⁷⁵ provide good support for Gerald Rosenberg’s assessment: “Evidence is hard to come by but what evidence there is suggests that any reductions that have been achieved in police brutality are independent of the Court and started before *Miranda*.”⁶⁷⁶

Unfairly coercive police questioning is not only limited to physical brutality, but also includes other techniques. It seems unlikely, however, that such forms of coercion were so widespread that their elimination would have greatly changed clearance rates.⁶⁷⁷ In addition, statistics on motions to suppress confessions confirm that coercive techniques were infrequently used at the time of *Miranda*. We should find frequent challenges to the voluntariness of confessions before *Miranda* if coerced confessions were in fact frequent.⁶⁷⁸ Such motions, however, appear to have been rare around the time of *Miranda*.⁶⁷⁹

Besides the relative scarcity of coercion, there is another reason for believing that clearance rate reductions were not caused by fewer coerced confessions: the nature of the *Miranda* rules themselves. *Miranda* was not particularly well designed as a shield against coercion. As Justice Harlan pointed out in his *Miranda* dissent, “Those who use third-degree tactics and deny them in court are equally able and destined to lie as skillfully about warnings and waivers.”⁶⁸⁰ In other words, police who used coercive tactics to obtain involuntary confessions would not necessarily have felt compelled after *Miranda* to change their already-improper methods.⁶⁸¹ And even if they did so, it was unlikely to have been so rapid a change as to produce a quick decrease in confession rates.

⁶⁷⁴ *Miranda v. Arizona*, 384 U.S. 436, 447-48 (1965); see also *id.* at 499-500 (Clark, J., dissenting) (“[T]he examples of police brutality mentioned by the Court are rare exceptions to the thousands of cases that appear every year in the law reports.” (footnotes omitted)). However, the majority continued on to state that police abuses “are [still] sufficiently widespread to be the object of concern.” *Id.* at 447-48.

⁶⁷⁵ For a discussion of this empirical evidence, see Cassell, *supra* note 16, at 474-75.

⁶⁷⁶ ROSENBERG, *supra* note 80, at 326.

⁶⁷⁷ Wayne LaFave reported the year before the *Miranda* decision that “[i]n the great majority of in-custody interrogations observed, the possibility of coercion appeared slight.” WAYNE R. LAFAVE, *ARREST: THE DECISION TO TAKE A SUSPECT INTO CUSTODY* 386 (1965); see also Barrett, *supra* note 49, at 42 (reporting California data in 1960 that most interrogations lasted under two hours). Similarly, the student observers in New Haven in 1966, assessing all forms of police “tactics,” found a “low level of coerciveness in most questioning.” Wald et al., *supra* note 51, at 1558.

⁶⁷⁸ Cassell, *supra* note 16, at 476. Such challenges are rarely made today and even more rarely granted. See *id.* at 392-93 (collecting the studies on this point).

⁶⁷⁹ See *id.* at 476 (citing studies showing few rejections of defendants’ statements by prosecutors or by judges at preliminary hearings).

⁶⁸⁰ *Miranda v. Arizona*, 384 U.S. 436, 505 (Harlan, J., dissenting).

⁶⁸¹ See Evele J. Younger, *Prosecution Problems*, 53 A.B.A. J. 695, 698 (1967) (“*Miranda* will not affect the brutal or perjurious policeman—he will continue to extract confessions without reference to the intonations of the Supreme Court; and when he testifies, he will simply conform his perjury to the latest ground rules.”).

Considering the low coerciveness of questioning even before *Miranda* and the ineffectiveness of the *Miranda* requirements in preventing coercion after,⁶⁸² it is unlikely that the 1966-to-1968 clearance rate drop is a manifestation of a change from a coercive to a noncoercive system.⁶⁸³

E. *The Logic of Miranda as a Cause*

Having carefully reviewed possible causes for the confession rate decline, we believe *Miranda*'s unprecedented restriction on police questioning is the most likely cause. But because we have been focusing on a host of specific and narrow issues, it might be useful to step back for a moment to look at the big picture: Is it logical to view *Miranda* as an important causal factor?

The conclusion that *Miranda* caused a significant part of the 1966-to-1968 decline in clearance rates is supported by a wide range of information. To begin with, there is an obvious, sharp drop in clearance rates between 1966 and 1968, at exactly the time when the drop should have occurred if *Miranda* harmed law enforcement.⁶⁸⁴ Next, the regression equations indicate that the drop for violent crimes and property crimes, as well as the individual crimes of robbery, vehicle theft, and larceny, cannot be explained by major criminal justice or socioeconomic variables.⁶⁸⁵ In addition, both the FBI and the police on the street contemporaneously identified *Miranda* as a hindrance to clearing crimes.⁶⁸⁶ These law enforcement reports are corroborated by declining confession rates reported in the before-and-after studies of *Miranda*'s impact⁶⁸⁷ and lower confession rates reported in this country in the years after *Miranda*.⁶⁸⁸

And what do *Miranda*'s defenders have to say about, in particular, the declining clearance rates as evidence of *Miranda*'s harm? Recall that exploring clearance rates to measure *Miranda*'s effect was not our idea—but that of *Miranda*'s defenders. The initial position (adopted by such prominent defenders of *Miranda* as Schulhofer, Kamisar, and others) was that clearance rates were a valid measure of whether *Miranda* harmed law enforcement and that the rates did not show a permanent decline after *Miranda*.⁶⁸⁹ This position collapsed, of

⁶⁸² Isolated cases of police brutality continued, of course, well after *Miranda*. See Susan Bandes, *Tracing the Pattern of No Pattern: Stories of Police Brutality*, 34 LOY. L.A. L. REV. 665, 666 (2001).

⁶⁸³ Note that we are only arguing that the clearance rate decline found from 1966 to 1968 is not explained by a sudden, contemporaneous reduction in coerciveness. "One could believe that police interrogation has generally become less coercive over the last several decades and still accept this claim." Cassell, *supra* note 16, at 478 n.533.

⁶⁸⁴ See *supra* notes 100-24 and accompanying text.

⁶⁸⁵ See *supra* notes 188-94 and accompanying text.

⁶⁸⁶ See *supra* notes 533-42.

⁶⁸⁷ See *supra* notes 16-47 and accompanying text.

⁶⁸⁸ See *supra* Section I.B.1.

⁶⁸⁹ See *supra* notes 87-90 and accompanying text.

course, in the face of FBI data to the contrary.⁶⁹⁰ Rather than concede (consistent with their earlier position) that these declining rates showed *Miranda*'s harmful effects, *Miranda*'s defenders instead shifted their position and told us that one "need only turn to trends in levels of crime and police resources during the [post-1965] period" to understand the clearance rate decline.⁶⁹¹ However, empirical evidence demonstrated that the 1966-to-1968 drop in clearance rates did not follow the pattern of rising crime rates throughout the 1960s and early 1970s.⁶⁹² Subsequently, *Miranda*'s defenders took the view that, while "[m]any forces contributed to clearance rate trends . . . there is no reason to think that one particular factor—*Miranda*—was among the factors playing a causal role."⁶⁹³ In addition to rising crime rates and reduced law enforcement resources, Schulhofer (for example) pointed to the limited "capacity" of the criminal justice system, urbanization, the proportion of crimes in small cities, and other less easily quantifiable factors.⁶⁹⁴ To the extent that such claims are empirically testable, they have been disproven: our regression analysis suggests that, even controlling for all the quantifiable factors, *Miranda* had a significant depressing effect on clearance rates, an effect found more consistently than for these suggested competing causes.⁶⁹⁵

Following publication of our regression results in 1998, John Donohue offered a competing specification of the equations, which diminished (but did not eliminate) our findings.⁶⁹⁶ This Article shows that, even using his specifications, with newly available data (through 2012) our *MIRANDA* effect is substantially confirmed.⁶⁹⁷

And yet another scholar, Floyd Feeney, thought that California clearance rate data undercut our conclusions.⁶⁹⁸ Instead, properly understood, the California data fully confirms our theory.⁶⁹⁹ And Feeney thought that the inclusion of

⁶⁹⁰ See *supra* notes 113-21 and accompanying text.

⁶⁹¹ Schulhofer, *supra* note 102, at 280 ("[S]oaring rates of violent crime and stagnant levels of police resources easily explain the observed clearance-rate trends."); Schulhofer, *supra* note 29, at 24 ("[T]here is no reason—none—to blame *Miranda*, rather than precipitously shrinking resources, for the decline in clearance rates during the late 1960s.").

⁶⁹² See Cassell, *supra* note 16, at 307, 308 fig.2 ("[C]rime rates were increasing well before *Miranda* was handed down and continued to climb afterwards.").

⁶⁹³ See Schulhofer, *Bashing Miranda*, *supra* note 125, at 357-58.

⁶⁹⁴ See *id.* at 365-67; Schulhofer, *supra* note 102, at 291-93.

⁶⁹⁵ See, e.g., *supra* Tables 2-4 (finding a statistically significant *MIRANDA* effect on violent and property crimes, but no statistically significant effect from crime rate, police variables, capacity variables, or crime in small cities—urbanization was significant only for violent crimes).

⁶⁹⁶ See Donahue, *supra* note 7, at 1159-69 (discussing the specifications used in Donahue's 1998 model).

⁶⁹⁷ See *supra* notes 224-74 and accompanying text.

⁶⁹⁸ See Feeney, *supra* note 8, at 18-41 (arguing that the California clearance data do not support a conclusion of a sharp fall in the clearance rate from 1966 to 1968).

⁶⁹⁹ See *supra* notes 329-65 and accompanying text.

arguably flawed data from New York City and few other big cities could explain away the confession rate drop we are concerned about.⁷⁰⁰ But our *MIRANDA* effect shows up in the FBI data for suburban and rural areas, as well as small- and mid-sized cities.⁷⁰¹

We believe that the fact that we have been able to use quantitative methods to disprove so many of the counterarguments advanced against our position should itself be evidence in favor of our handcuffing-the-cops theory. But additional empirical evidence has recently developed that strongly supports our hypothesis. In an important empirical study, Stephen Rushin and Griffin Edwards considered the issue of whether legal regulation of police behavior could inadvertently reduce officer aggressiveness, thereby increasing crime. To test this issue, they compared all police departments that have been subject to federally mandated reform under consent decrees with those who have not. They found that the introduction of such external reforms “was associated with a statistically significant uptick in some crime rates, relative to unaffected municipalities.”⁷⁰² They concluded that this effect was due to “de-policing”—i.e., police becoming less aggressive, and thereby less effective in fighting crime.⁷⁰³ Rushin and Edwards thought it was “likely that external regulation of law enforcement comes with growing pains. Frontline officers may find the imposition of external mandates to be procedurally unjust.”⁷⁰⁴ While Rushin and Edwards researched the impact of consent decrees, the same logic about the harmful effects of “external regulation” can be easily applied to the *Miranda* decision.

Finally, one last important fact remains to be considered: common sense. Our conclusion is simply that when the Supreme Court imposed unprecedented restrictions on an important police investigative technique,⁷⁰⁵ the police became less effective. This was exactly what the dissenters predicted in *Miranda*,⁷⁰⁶ a

⁷⁰⁰ See Feeney, *supra* note 8, at 63.

⁷⁰¹ See *supra* notes 318-28 and accompanying text.

⁷⁰² Rushin & Edwards, *supra* note 127 (manuscript at 1).

⁷⁰³ *Id.* (manuscript at 5).

⁷⁰⁴ *Id.* (manuscript at 55).

⁷⁰⁵ See *id.* (manuscript at 6 n.15) (observing that *Miranda* was a “transformational regulation[] of American law enforcement” agencies); Schulhofer, *supra* note 21, at 552 n.214 (noting *Miranda* was a “radical departure” from the assumption of the times); cf. FRYDL & SKOGAN, *supra* note 41, at 255 (“*Miranda* is no doubt the best-known criminal procedure decision in the United States.”); Amos N. Guiora, *Relearning Lessons of History: Miranda and Counterterrorism*, 71 LA. L. REV. 1147, 1152 (2011) (identifying *Miranda* as “the cornerstone of the Warren Court’s criminal procedure revolution”); Frederick Schauer, *The Miranda Warning*, 88 WASH. L. REV. 155, 155 (2013) (describing *Miranda* as “the most famous appellate case in the world”). See generally THOMAS & LEO, *supra* note 671, at 141 (discussing the *Miranda* “volcano”); AMOS N. GUIORA, EARL WARREN, ERNESTO MIRANDA AND TERRORISM (forthcoming 2017) (describing the importance of the *Miranda* decision).

⁷⁰⁶ See *Miranda v. Arizona*, 384 U.S. 436, 516 (1966) (Harlan, J., dissenting) (“There can be little doubt that the Court’s new code would markedly decrease the number of

claim that the majority did not bother to refute.⁷⁰⁷ In short, we are not asserting anything unusual; instead, we are merely suggesting the obvious. The proposition that *Miranda* harmed law enforcement should be uncontroversial. Instead, it is the contrary academic wisdom that should receive our skepticism.

VII. REFORMING *MIRANDA*

So far we have argued that strong evidence (the combination of confession rate and clearance rate data) supports the view that *Miranda* has made it noticeably more difficult for police officers to obtain confessions. Assuming that *Miranda* has harmed law enforcement, the question would remain what to do with that information. Of course, one possible conclusion is that *Miranda* should simply be overruled, as some commentators have suggested.⁷⁰⁸ In wrapping up this Article, we make a more limiting argument and suggest the Court might take a somewhat different course. The empirical evidence concerning *Miranda*'s harm reveals ways *Miranda* could be reformed to reduce those harms while securing the goals that *Miranda* hopes to achieve.

In discussing reforming *Miranda*, it is important to emphasize one difference between the decision and other seemingly similar Supreme Court decisions. In arguing that *Miranda* has "handcuffed" the cops, we are not complaining about the fact that constitutional rights pose obstacles for law enforcement. Commenting on the Fourth Amendment exclusionary rule, for example, Dallin Oaks concluded that "[t]he whole argument about the exclusionary rule 'handcuffing' the police should be abandoned. If this is a negative effect, then it is an effect of the constitutional rules, not an effect of the exclusionary rule as the means chosen for their enforcement."⁷⁰⁹

Miranda stands on different footing. Despite what some commentators have argued (including Donald Dripps in this Symposium⁷¹⁰), the *Miranda* decision is clearly unlike other constitutional decisions in explicitly inviting alternative approaches to regulating police interrogation. The decision itself stated it had no

confessions."); *id.* at 541 (White, J., dissenting) (discussing clearance rates and concluding that "[t]he rule announced today will measurably weaken the ability of the criminal law to perform these tasks").

⁷⁰⁷ See *id.* at 481 (claiming that the decision "should not constitute an undue interference with a proper system of law enforcement").

⁷⁰⁸ See JOSEPH D. GRANO, CONFESSIONS, TRUTH AND THE LAW 199-222 (1993); U.S. DEP'T OF JUSTICE, OFFICE OF LEGAL POLICY, REPORT TO THE ATTORNEY GENERAL ON THE LAW OF PRETRIAL INTERROGATION (1986), reprinted in 22 U. MICH. J.L. REFORM 437 (1989). But cf. Alschuler, *supra* note 40, at 890 (predicting that the chance the Supreme Court will overrule its *Miranda* decision is "nonexistent"); William T. Pizzi & Morris B. Hoffman, *Taking Miranda's Pulse*, 58 VAND. L. REV. 813, 849 (2005) (predicting that, in the long term, the Court will eventually either overrule *Miranda* or recast it substantially).

⁷⁰⁹ Oaks, *supra* note 127, at 754.

⁷¹⁰ See Dripps, *supra* note 521, at 894-95 (arguing that formal critiques of *Miranda* are inconsistent with conventional Fourth Amendment jurisprudence, among other bodies of law).

intention of “creat[ing] a constitutional straitjacket,”⁷¹¹ and specifically “encourage[d] Congress and the States to continue their laudable search for increasingly effective ways of protecting the rights of the individual while promoting efficient enforcement of our criminal laws.”⁷¹² While the Court’s later decision in *Dickerson* gave a narrow reading of this language, it certainly did not retreat from the proposition that *Miranda* could be replaced with an alternative.⁷¹³

In this Section, we briefly sketch what a reasonable and constitutional alternative to *Miranda* could look like.⁷¹⁴ In crafting this alternative, we use the quantitative information about *Miranda*’s harms we have gathered to propose removing the decision’s most harmful features. The alternative we propose only serves to highlight the fact that *Miranda* has, indeed, handcuffed the cops, because *Miranda*’s harmful effects are incurred unnecessarily. Specifically, the alternative we propose continues delivering warnings to suspects but adjusts them so they do not promise suspects that they can immediately stop questioning. We would also require police to record police interrogation. And we would encourage more careful scrutiny of voluntariness issues. These modifications would remove *Miranda*’s handcuffs from the cops while protecting suspects’ legitimate interests against being coerced into giving involuntary confessions.

A. *Eliminating Miranda’s Waiver Requirement and Questioning Cut-Off Rules*

In this Article’s previous Sections, we reviewed the available empirical evidence in an attempt to establish that *Miranda* had harmful effects on crime clearance rates and, ultimately, on confession and conviction rates as well. Assuming *Miranda* created such harms, what features of *Miranda* are responsible?

One argument might be that the famous *Miranda* warnings inhibited suspects from talking. For reasons we articulate in the next subsection, we think that

⁷¹¹ *Miranda*, 384 U.S. at 467.

⁷¹² *Id.* For the origins of this language in the opinion, see Charles D. Weisselberg, *Saving Miranda*, 84 CORNELL L. REV. 109, 123-25 (1998).

⁷¹³ See *Dickerson v. United States*, 530 U.S. 428, 435-40 (2000) (holding that *Miranda* was a constitutionally based decision and, consequently, cannot be modified by Congress, but observing that Congress retained the power to create alternative, effective approaches); see also *Smith v. State*, 974 A.2d 991, 999 (Md. Ct. Spec. App. 2009) (“While the *Dickerson* Court put an end to this campaign to dismantle *Miranda* via the federal statute from 1968, the Court reiterated that the specific *Miranda* warnings themselves are not mandated by the Constitution, and implied that new laws, passed by either Congress or state legislatures, which more adequately safeguard the Fifth Amendment privilege, might be acceptable.” (quoting ANDREW JEZIC, FRANK MOLONY & WILLIAM NOLAN, MARYLAND LAW OF CONFESSIONS 192-93 (2005))), *aff’d*, 995 A.2d 685 (Md. 2010).

⁷¹⁴ Cf. Cassell & Fowles, *supra* note 5, at 1129-32 (discussing possible alternatives to *Miranda*).

unlikely. Instead, the features of *Miranda* that cause harm are the rules that block police questioning of suspects, specifically the requirements that police obtain a “waiver” from a suspect before proceeding with questioning and that police must stop questioning when a suspect invokes his rights.⁷¹⁵ These rules harm law enforcement almost by definition. As Joseph Grano has explained, “By giving the suspect power to prevent questioning even before it begins, . . . *Miranda* gave the law of confessions a ‘single focus—protection of the suspect.’”⁷¹⁶ While the *Miranda* rules seem to envision suspects consulting with counsel and then answering questions, as a practical matter that does not occur. As Alschuler has nicely put it in this Symposium, *Miranda*’s promise of a right to counsel during questioning is not really a right to counsel; rather “[i]t is an incantation that suspects can use to shut down questioning.”⁷¹⁷

Generally, academic commentators have been unperturbed about *Miranda*’s questioning cut-off features. The standard argument is that most suspects waive their rights and so *Miranda* has little effect. Indeed, the argument is typically accompanied by a citation to empirical research conducted by Cassell suggesting that only 20% of suspects invoke their *Miranda* rights.⁷¹⁸ But if the glass is 80%

⁷¹⁵ See David Garthe, *The Investigation of Robbery*, in IV THE PREVENTION AND CONTROL OF ROBBERY 93, 112 (Floyd Feeney & Adrienne Weir eds., 1973) (noting views of one officer that “since *Miranda* robbery suspects have ‘clammed up’” and placing emphasis on the fourth warning).

⁷¹⁶ GRANO, *supra* note 708, at 219 (quoting Gerald M. Caplan, *Miranda Revisited*, 93 YALE L.J. 1375, 1469 (1984)).

⁷¹⁷ See Alschuler, *supra* note 40, at 874.

⁷¹⁸ Cassell & Hayman, *supra* note 58, at 859 (reporting that 83.7% of suspects given their *Miranda* rights waived them and concluding that “[t]he evidence, although generally quite dated, suggests that about 20% of all suspects invoke their *Miranda* rights”); see also Cassell, *supra* note 16, at 495-96 & n.623 (collecting other information on waiver rates); Saul M. Kassir et al., *Police Interviewing and Interrogation: A Self-Report Survey of Police Practices and Beliefs*, 31 LAW & HUM. BEHAV. 381, 389 (2007) (estimating that 81% of adult suspects waive); Richard A. Leo, *Miranda’s Revenge: Police Interrogation as a Confidence Game*, 30 LAW & SOC’Y REV. 259, 260 (reporting that 78% of custodial suspects waived their *Miranda* rights); George C. Thomas III, *Stories About Miranda*, 102 MICH. L. REV. 1959, 1972 (2004) (finding a 68% waiver rate in reported and litigated cases). An even higher waiver rate of 93% was reported in one study. Anthony J. Domanico, Michael D. Cicchini & Lawrence T. White, *Overcoming Miranda: A Content Analysis of the Miranda Portion of Police Interrogations*, 49 IDAHO L. REV. 1, 13 (2012). But the study rested on an unrepresentative sample of cases in which a videotape was made of the interrogation, the suspect was charged, and the public defender’s office agreed to provide the tape for further analysis, *id.* at 11-13, rendering the findings of little use in estimating an overall waiver rate.

Research on juveniles also finds high waiver rates. See Feld, *supra* note 11, at 429 (reporting a 92.8% juvenile waiver rate); Feld, *supra* note 65, at 255 (reporting 80% waiver rate by juveniles); Viljoen, Klaver & Roesch, *supra* note 64, at 261 (reporting that in a retrospective study of delinquents held in detention, only 13.15% “reported that they asserted the right to silence”). It seems unlikely that this juvenile data are directly applicable to adult interrogations. See *supra* note 77 and accompanying text (noting that juveniles are more likely

full, it is likewise 20% empty. Twenty percent is a very large number in this context, since it suggests that 20% of all criminal suspects in this country—one out of every five—are essentially immune from police questioning.⁷¹⁹

What makes these numbers even more troubling is that it turns out that there is good evidence that the suspects who are most likely to invoke their rights are disproportionately the suspects whom police would most like to question. Suspects with criminal records are generally more likely to invoke their *Miranda* rights than those without one.⁷²⁰ There is also experimental evidence suggesting that innocent persons are more likely to waive their *Miranda* rights than guilty persons.⁷²¹ All this suggests that *Miranda* may be backwards public policy because it confers protection disproportionately on those who are least entitled to it. As Stephanos Bibas has cogently argued, *Miranda*'s rules have "shielded some savvy, guilty recidivists while doing little to protect juveniles, the mentally retarded, and other innocent defendants most likely to confess."⁷²²

Miranda's waiver and questioning cut-off rules likely have additional harms beyond blocking questioning of suspects who refuse to waive. Police may decide not to even attempt to interrogate a suspect because of the need to obtain a waiver, something the statistics regarding invocations of rights will fail to

to confess compared to adults).

⁷¹⁹ In theory, if a suspect invokes his *Miranda* rights, the police could simply ignore that invocation and continue to question the suspect for investigative purposes. There is little research on the extent to which police follow such practices, but the research that exists suggest that police do not generally employ this practice. See Cassell & Hayman, *supra* note 58, at 861 ("[I]n none of our cases did the police continue questioning a suspect after an invocation of *Miranda* rights."); cf. Thomas, *supra* note 718, at 1978 (finding conflicting evidence in a sample of mostly appellate cases about whether police stop questioning after invocations); Weisselberg, *supra* note 45, at 1552-54 (discussing California training materials discouraging "two step" questioning approaches).

⁷²⁰ See Leo, *Inside the Interrogation Room*, *supra* note 57, at 286 (finding suspects with felony records four times more likely to invoke *Miranda* rights than those without records); William J. Stuntz, *Miranda's Mistake*, 99 MICH. L. REV. 975, 993 (2001) (describing affluent suspects and recidivists as those most likely "to know that talking to the police is a tactical error"); see also Cassell & Hayman, *supra* note 58, at 895-96 & tbl.9 (finding suspects with prior records more likely to invoke rights, but result was not statistically significant); Feld, *supra* note 65, at 255-56 (juveniles with one or more prior felony arrests waived their *Miranda* rights 68% of the time, compared to 89% for juveniles with fewer or less serious police contacts); Feld, *Questioning Gender*, *supra* note 68, at 1095-96 (finding both boys and girls with prior criminals records are significantly more likely to invoke their rights). But cf. Leo, *Inside the Interrogation Room*, *supra* note 57, at 291 (noting that "class" had no effect on the success rate of police interrogation).

⁷²¹ Saul M. Kassir & Rebecca J. Norwick, *Why People Waive Their Miranda Rights: The Power of Innocence*, 28 LAW & HUM. BEHAV. 211, 213 (2004). The extent to which laboratory studies can be applied to real world police questioning remains uncertain. See Slobogin, *supra* note 47, at 1183.

⁷²² Weisselberg & Bibas, *supra* note 43, at 77.

capture.⁷²³ In addition, to avoid the need to obtain *Miranda* waivers, police may decide to proceed with noncustodial questioning rather than custodial questioning, as Alschuler and Dripps both point out in their contributions to this Symposium.⁷²⁴ While police appear to have received some training on this noncustodial maneuver,⁷²⁵ the extent to which it is available is uncertain. And, in fact, police generally question suspects in custody rather than outside of it. The one study to investigate this issue quantitatively (the Cassell/Hayman study) found that 69.9% of 173 police interviews were custodial while 30.1% were noncustodial.⁷²⁶ The concern is that the same study also found that noncustodial questioning was substantially less effective in obtaining incriminating statements (56.9% success for custodial questioning vs. 30.0% success for noncustodial questioning), a difference that was statistically significant.⁷²⁷ This lower success rate is consistent with reports from the leading police interrogation manual that custodial interrogation is often needed to obtain a confession.⁷²⁸

It is also possible for police to avoid *Miranda*'s requirements by engaging in "public safety" questioning.⁷²⁹ But while some commentators have suggested that this recognized exception "carv[ed] a gaping hole" in *Miranda*'s requirements,⁷³⁰ its impact on day-to-day law enforcement appears to be almost nonexistent.⁷³¹

The bottom line from the available empirical evidence is that in many cases, *Miranda*'s waiver requirement will prevent police officers from questioning suspects at all⁷³² (or, lead officers to questioning them in less-likely-to-be-productive noncustodial settings). To be sure, even if officers had been able to

⁷²³ See Cassell & Hayman, *supra* note 58, at 855-58.

⁷²⁴ See Alschuler, *supra* note 40, at 869-72; Dripps, *supra* note 521, at 918.

⁷²⁵ See Weisselberg, *supra* note 45, at 1546-47.

⁷²⁶ Cassell & Hayman, *supra* note 58, at 882-83; cf. Brian C. Jayne, *Empirical Experiences of Required Electronic Recordings of Interviews and Interrogations on Investigator's Practices and Case Outcomes*, 4 LAW ENFORCEMENT EXECUTIVE F. 103, 106 tbl.2 (2004) (finding that, of police investigators surveyed following the imposition of mandatory recording during custodial interrogation, 8% significantly increased noncustodial interrogations and 26% somewhat increased such interrogations).

⁷²⁷ Cassell & Hayman, *supra* note 58, at 883 (discussing the effect of custodial status on acquiring incriminating statements).

⁷²⁸ See INBAU ET AL., *supra* note 82, at xiii ("Criminal offenders, except those caught in the commission of their crimes, ordinarily will not admit their guilt unless questioned under conditions of privacy and for a period of perhaps several hours.").

⁷²⁹ *New York v. Quarles*, 467 U.S. 649, 655 (1984).

⁷³⁰ Irene M. Rosenberg & Yale L. Rosenberg, *A Modest Proposal for the Abolition of Custodial Confessions*, 68 N.C. L. REV. 69, 82 (1989).

⁷³¹ See Cassell & Hayman, *supra* note 58, at 885 (finding only one case out of 173 suspects that even arguably fell within the public safety exception); Thomas, *supra* note 718, at 1970-72 (reporting that in a sample of 211 litigated cases, only 2.8% (6/211) involved public safety questioning).

⁷³² See Stuntz, *supra* note 720, at 984-85.

question all these suspects, not all of them would have confessed or even given incriminating statements. But “guilty suspects need not confess for interrogation to be useful; in general, if the suspect says much of anything the police benefit, and benefit substantially.”⁷³³

Miranda’s waiver requirement does not rest on firm constitutional foundations.⁷³⁴ It is something of an odd duck, because the waiver requirement “is plainly at odds with the rest of the opinion.”⁷³⁵ After explaining that custodial police interrogation was an inherently compelling environment, the *Miranda* Court allowed suspects to waive their *Miranda* rights in that same environment.⁷³⁶ And what that waiver means is not immediately clear, because “no sane person would knowingly relinquish a right to be free of compulsion.”⁷³⁷

In any event, like other features of the *Miranda* regime, the waiver requirement is simply a prophylactic rule that can be replaced by a reasonable alternative. And it should be. Police do nothing wrong when they simply ask a suspect, in custody, whether he has anything to say about an alleged crime. In suggesting otherwise, *Miranda* “runs counter to our ordinary standards of morality.”⁷³⁸

An otherwise-excellent recent article by Tonya Jacobi glosses over this point. Jacobi proposes steps to “discourage waiver”⁷³⁹ on the grounds that *Miranda*, as currently structured, “is not doing its job in properly informing suspects and girding them in facing the inherently coercive atmosphere of the stationhouse.”⁷⁴⁰ But “girding” suspects to face police questioning is exactly what causes social harm—the trade-off is unavoidable. And why we would want to “gird” suspects to resist police efforts to have them confess to their crimes is unexplained.

Rather than strengthening the waiver requirement, we propose abolishing it. In our view, police officers should be free to give suspects their warnings and, after ascertaining that suspects understand those warnings, proceed to questioning them. Recent decisions suggest that the Court might be receptive to steps in that direction. While the *Miranda* decision suggested the prosecution

⁷³³ *Id.* at 995.

⁷³⁴ See Susan R. Klein, *Transparency and Truth During Custodial Interrogations and Beyond*, 97 B.U. L. REV. 993, 994 (2017).

⁷³⁵ Tracey Maclin, *A Comprehensive Analysis of the History of Interrogation Law, with Some Shots Directed at Miranda v. Arizona*, 95 B.U. L. REV. 1387, 1411 (2015) (quoting THOMAS & LEO, *supra* note 23, at 172).

⁷³⁶ *Miranda v. Arizona*, 384 U.S. 436, 445 (1965) (“The defendant may waive effectuation of these rights, provided the waiver is made voluntarily, knowingly and intelligently.”).

⁷³⁷ Alschuler, *supra* note 40, at 853.

⁷³⁸ *Id.* at 63–64 (quoting WALTER V. SCHAEFER, *THE SUSPECT AND SOCIETY* 59 (1967)); see also Charles T. McCormick, *Law and the Future: Evidence*, 51 NW. U. L. REV. 218, 222 (1956) (“[O]rdinary morality . . . sees nothing wrong in asking a man, for adequate reason, about particular misdeeds of which he has been suspected and charged.”).

⁷³⁹ Jacobi, *supra* note 44, at 78.

⁷⁴⁰ *Id.*

would face a “heavy burden” in establishing waiver,⁷⁴¹ more recent Court decisions have undercut that holding. In an important decision handed down in June 2010, *Berghuis v. Thompson*,⁷⁴² the Supreme Court held that a suspect could implicitly waive his *Miranda* rights by talking to police and that affirmative waiver of rights from a suspect is not required.⁷⁴³ The constitutional permissibility of abolishing the waiver requirement follows straightforwardly from the *Berghuis* holding.

Because *Berghuis* allows the police to dispense with a waiver, some commentators have criticized it in apocalyptic terms. Some have suggested that it almost marks the end of the *Miranda* regime.⁷⁴⁴ Others have argued that it has “enormous practical implications” for policing.⁷⁴⁵ Their contention is that *Berghuis* offers law enforcement agencies the opportunity to eliminate from their standard *Miranda* warning procedure the explicit request for a waiver of rights⁷⁴⁶—precisely the step we propose here. But the extent to which American law enforcement agencies have generally taken up that invitation is unclear. Barry Feld’s study of interrogations of juveniles in Minnesota found no examples of implied waivers, but it rested on interrogations conducted between 2003 and 2006, before *Berghuis* was handed down.⁷⁴⁷ Since *Berghuis* was decided, some law enforcement officers have apparently been trained to avoid asking for explicit waivers, particularly in California, where training materials appear to be particularly aggressive in how to avoid *Miranda*’s costs.⁷⁴⁸ But

⁷⁴¹ *Miranda*, 384 U.S. at 475 (“If the interrogation continues without the presence of an attorney and a statement is taken, a heavy burden rests on the government to demonstrate that the defendant knowingly and intelligently waived his privilege against self-incrimination and his right to retained or appointed counsel.”).

⁷⁴² 560 U.S. 370 (2010).

⁷⁴³ *Id.* at 384. For an insightful debate about the merits of *Berghuis*, see Weisselberg & Bibas, *supra* note 43.

⁷⁴⁴ See, e.g., Richard L. Budden, Comment, *All in All, Miranda Loses Another Brick from Its Wall: The U.S. Supreme Court Swings Its Hammer in Berghuis v. Thompson*, *Dealing A Crushing Blow to the Right to Remain Silent*, 50 WASHBURN L.J. 483, 496-509 (2011); Illan M. Romano, Note, *Is Miranda on the Verge of Extinction? The Supreme Court Loosens Miranda's Grip in Favor of Law Enforcement*, 35 NOVA L. REV. 525, 526 (2011); cf. Maclin, *supra* note 735, at 1406 n.107 (agreeing that “*Thompson* ‘is perhaps the most significant *Miranda* case yet decided’” (quoting THOMAS & LEO, *supra* note 671, at 192)).

⁷⁴⁵ Weisselberg & Bibas, *supra* note 43, at 75; see also THOMAS & LEO, *supra* note 671, at 192 (“[I]n removing the last residue of the ‘heavy burden’ waiver language from *Miranda* doctrine, *Thompson* is perhaps the most significant *Miranda* case yet decided.”).

⁷⁴⁶ See, e.g., Kinports, *supra* note 45, at 406 (arguing that *Berghuis* and related decisions “allow law enforcement officials to do a complete end run around *Miranda*, reducing the Warren Court’s decision to a formalistic requirement that warnings be read and otherwise reinstating the voluntariness due process test”).

⁷⁴⁷ See Feld, *supra* note 11, at 419 n.125, 428.

⁷⁴⁸ See TRACEY MACLIN, THE SUPREME COURT AND THE FOURTH AMENDMENT’S EXCLUSIONARY RULE 308 n.54 (2013) (discussing the practice of “questioning suspects

recent California appellate decisions on *Miranda* issues do not show a clear pattern of California police officers dispensing with the formal waiver requirement.⁷⁴⁹

Based on our empirical evidence of harm to law enforcement from *Miranda*, officers should take steps to move in the direction *Berghuis* allows. Asking suspects directly for a waiver obviously creates the chance suspects will refuse—preventing any questioning whatsoever. Moving away from explicit waivers will likely lead to additional confessions (and crime clearances) and is consistent with current *Miranda* doctrine as explicated in *Berghuis*.

Closely related to the concept of waiver are the questioning cutoff rules, which prevent police from moving forward with questioning if a suspect “lawyers up.”⁷⁵⁰ Here, too, we believe that these rules create social costs by preventing legitimate police questioning. And here too, we believe reasonable alternatives exist, as the Department of Justice (for example) outlined in its report on *Miranda*.⁷⁵¹ Along with the formal waiver requirement, the questioning cutoff rules should be abolished and replaced with a videotaping regime—a regime we explain below.

B. *Modifying Miranda’s Warnings*

If jettisoning *Miranda*’s waiver and questioning cut-off requirements reduces social harm, should the famous warnings also be jettisoned? Here the available empirical evidence suggests that we can have our cake and eat it too—i.e., we can give warnings to suspects without having them interfere with police efforts.

It is possible to wonder whether *Miranda* warnings do any good. The available evidence suggests that the warnings are not generally understood by suspects.⁷⁵² And in this Symposium, there did not seem to be much enthusiasm that the warnings are doing any real good.⁷⁵³ But perhaps requiring police to

‘outside of *Miranda*’); Weisselberg, *supra* note 712, at 132-39 (discussing earlier California training practices); Weisselberg, *supra* note 45, at 1577 (same).

⁷⁴⁹ Compare *People v. Mejia*, No. E064637, 2016 WL 4655781, at *1-2 (Cal. Ct. App. Sept. 7, 2016) (“The officer first read defendant his *Miranda* rights from a card, concluding with two questions: ‘Do you understand the rights I read to you? Having these rights in mind, do you want to talk to me about the rifle?’”), with *In re Art T.*, 234 Cal. App. 4th 335, 340 (2015) (describing how an officer “made no attempt to secure an express waiver of rights” from a suspect but simply continued to talk to him after reading of rights).

⁷⁵⁰ See *Minnick v. Mississippi*, 498 U.S. 146, 156 (1990); *Arizona v. Roberson*, 486 U.S. 675, 687-88 (1988); *Edwards v. Arizona*, 451 U.S. 477, 487 (1981).

⁷⁵¹ See U.S. DEP’T OF JUSTICE, OFFICE OF LEGAL POLICY, *supra* note 708, at 39-40 (“[W]e see no reason why a reasonable effort should not be made to persuade an uncooperative suspect to make a statement or answer questions.”).

⁷⁵² Richard Rodgers et al., *General Knowledge and Misknowledge of Miranda Rights: Are Effective Miranda Advisements Still Necessary?*, 19 PSYCHOL. PUB. POL’Y & L. 432, 432 (2013).

⁷⁵³ See Alschuler, *supra* note 40, at 890 (“Fifty years’ experience has confirmed the fourfold failure of the fourfold warnings.”); Dripps, *supra* note 521, at 932-33 (arguing for a

deliver warnings to suspects in custody can be justified on the grounds that it signals our society's commitment to the rule of law, even during police interrogation.⁷⁵⁴

In any event, given that the *Miranda* decision required warnings, the simplest path for reform would be to leave them largely in place. Fortunately, from a social harm perspective, the available literature suggests the warnings themselves are not the cause of lost confessions and clearances.⁷⁵⁵ The best evidence of this fact comes from the experience of law enforcement agencies following the Supreme Court's 1964 *Escobedo* decision, after which many police agencies began giving various warnings without substantial effects on confessions.⁷⁵⁶ At the annual meeting of the National Association of Attorneys General, held in May 1966 (after *Escobedo* but shortly before *Miranda*), the "clear consensus" was that *Escobedo* had had little effect on the rate of confessions and that confession rates remained constant even in those states where courts had extended *Escobedo* to require the police to warn suspects of their rights.⁷⁵⁷ A related indication that warnings per se were not responsible for the change in the rates comes from the practice of the FBI, which gave warnings on the right to remain silent without apparent adverse effect.⁷⁵⁸

The available empirical evidence also confirms that warnings have comparatively little effect on confession rates. In Detroit, there was, at most, a 2.8% drop in the confession rate after police began warning suspects of a right to remain silent after *Escobedo*—from 60.8% of all cases in 1961 to 58% of all

consistent approach to both the Fourth and Fifth Amendments); Andrew Guthrie Ferguson & Richard A. Leo, *The Miranda App: Metaphor and Machine*, 97 B.U. L. REV. 935, 937 (2017) ("Strikingly, the core problem that gave rise to *Miranda*—namely, the coercive pressure of custodial interrogation—has remained largely unchanged."); Eve Brensike Primus, *Disentangling Miranda and Massiah: How to Revive the Sixth Amendment Right to Counsel as a Tool for Regulating Confession Law*, 97 B.U. L. REV. 1085, 1087 (2017) ("Many scholars have mourned this dilution of suspects' *Miranda* rights."); Slobogin, *supra* note 47, at 1158-59. *But see* Thomas, *supra* note 6, at 1215.

⁷⁵⁴ See Schulhofer, *supra* note 101, at 451.

⁷⁵⁵ See Cassell, *supra* note 16, at 493-94 (arguing that the simple recitation of the rights does not appear to be the cause of the decline in the confession rates).

⁷⁵⁶ See Cyril D. Robinson, *Police and Prosecutor Practices and Attitudes Relating to Interrogation as Revealed by Pre- and Post-Miranda Questionnaires: A Construct of Police Capacity to Comply*, 1968 DUKE L.J. 425, 482 (reporting that after *Escobedo* but before *Miranda* ninety percent of police and prosecutors said they advised suspects of their right to silence).

⁷⁵⁷ Sidney E. Zion, *Prosecutors Say Confession Rule Has Not Harmed Enforcement*, N.Y. TIMES, May 18, 1966, at 27.

⁷⁵⁸ *Miranda v. Arizona*, 384 U.S. 436, 483 (1966). The *Miranda* majority went on to equate the limited FBI practice of warning of rights with the *Miranda* requirements—an equation that was clearly wrong. See GRAHAM, *supra* note 673, at 181-82 (noting that "important differences" made *Miranda* "far more generous"); U.S. DEP'T OF JUSTICE, OFFICE OF LEGAL POLICY, *supra* note 708, at 39-40 (calling FBI practice "basically different").

cases in 1965.⁷⁵⁹ In Pittsburgh, a substantial decline occurred in the confession rate after *Miranda*, even though it was the pre-*Miranda* practice of the detectives to warn suspects of their right to remain silent and to, at some point, advise suspects that they would receive counsel.⁷⁶⁰ In New Haven, the *Yale Law Journal* reported no support in its data for the claim that warnings of rights caused a decline in police success at obtaining confessions.⁷⁶¹ Finally, in Philadelphia, an estimated 90% of arrested suspects made statements before *Escobedo*, 80% (estimated) after *Escobedo* when police gave limited warnings, 68.3% when police gave more extended warnings as required by the Third Circuit, and 40.7% when police followed *Miranda*.⁷⁶² Thus, the biggest drop followed not the imposition of warning requirement itself, but rather the imposition of the *Miranda* warnings-and-waiver regime.

While warnings themselves do not substantially interfere with law enforcement efforts to obtain convictions, if *Miranda*'s waiver requirement and cut-off rules are abolished, that will necessitate some corollary modification of the *Miranda* warnings. As currently structured, the warnings promise a suspect a lawyer before questioning occurs—implicitly creating the questioning cut-off rule discussed in the previous Section. A modification to limit *Miranda*'s harms would need to change that promise. One way of redrafting the *Miranda* rules along these lines would be as follows:

- (1) You have the right to remain silent.
- (2) Anything you say may be used as evidence.
- (3) You have a right to an attorney when we bring you before a judge.
- (4) If you cannot afford an attorney, the judge will appoint one for you without charge.
- (5) We are required to bring you before a judge without unnecessary delay.⁷⁶³

These warnings modify the third and fourth *Miranda* warnings, which promise suspects an attorney during questioning as part of *Miranda*'s prophylactic protections.⁷⁶⁴ As a practical matter, police never provide suspects

⁷⁵⁹ See Souris, *supra* note 50, at 255; see also Cassell, *supra* note 16, at 428 (discussing the study at greater length).

⁷⁶⁰ See Seeburger & Wettick, *supra* note 87, at 8.

⁷⁶¹ Wald et al., *supra* note 51, at 1569.

⁷⁶² See *Controlling Crime Hearings*, *supra* note 292, at 200-01; Cassell, *supra* note 16, at 402-04.

⁷⁶³ See Cassell, *supra* note 16, at 496.

⁷⁶⁴ The Sixth Amendment's right to counsel does not generally apply during custodial interrogation following an arrest. It is possible to craft an argument for expanding the right to counsel during questioning, as Eve Primus does capably in this Symposium. See Primus, *supra* note 753, at 1089 (arguing for a more "robust" protection for criminal suspects under the Sixth Amendment during questioning). However, Primus one-sidedly assesses the concerns of suspects, and her proposals would clearly increase the harms to law enforcement

with an attorney if they ask for one.⁷⁶⁵ Moreover, the Court has already approved a warning that contains similar language to these.⁷⁶⁶ As Tonja Jacobi has pointed out, “Both prior to and subsequent to *Dickerson*, the Court has displayed a willingness to tolerate legislative tinkering with *Miranda*, by varying the *Miranda* warnings, rather than substituting them altogether.”⁷⁶⁷ The proposal also adds a fifth warning, advising suspects of the constitutional requirement of prompt appearance before a judge. This kind of warning has been suggested by other commentators,⁷⁶⁸ and it does not seem likely to interfere with confessions.

It is also possible to wonder about broader changes to the *Miranda* warnings. For example, some commentators have suggested that police officers might be required to have a “dialogue” with suspects to ensure that they understand their rights.⁷⁶⁹ Still others have discussed ways in which the *Miranda* warnings might be delivered in order to make them more “effective.”⁷⁷⁰ The concerns about these types of modifications is that they would likely increase the number of suspects who refused to waive their rights, thereby exacerbating the harms we have tried to explicate in this Article. Perhaps such broader changes can be justified through a cost-benefit analysis. But without more careful consideration of the serious costs that follow from lost confessions, it is hard to say.

One modification of the warnings that would not harm law enforcement—and could significantly increase the number of confessions—would be to modify the warnings so that they track the warning police currently deliver in England and Wales.⁷⁷¹ Suspects there are advised it “may harm your defense if you do not mention when questioned something which you later rely on in court.”⁷⁷² Craig Bradley has made the case for changing *Miranda* warnings along these lines at length.⁷⁷³ And Chris Slobogin has pointed out that this language was added to

discussed in this Article by preventing police from questioning an even larger percentage of suspects than *Miranda* prevents.

⁷⁶⁵ See Alschuler, *supra* note 40, at 873 (discussing the “right to counsel that wasn’t”).

⁷⁶⁶ *Duckworth v. Eagan*, 492 U.S. 195, 198 (1989).

⁷⁶⁷ Jacobi, *supra* note 44, at 22 (first citing *Duckworth*, 492 U.S. at 202-03; then citing *Florida v. Powell*, 559 U.S. 50, 62 (2010)).

⁷⁶⁸ See, e.g., *id.* at 28-30.

⁷⁶⁹ See, e.g., Andrew Guthrie Ferguson, *The Dialogue Approach to Miranda Warnings and Waiver*, 49 AM. CRIM. L. REV. 1437 (2012).

⁷⁷⁰ See, e.g., Ferguson & Leo, *supra* note 753, at 948-49.

⁷⁷¹ See generally Chris Blair, *Miranda and the Right to Silence in England*, 11 TULSA J. COMP. & INT’L L. 1 (2003); Gordon Van Kessel, *The Suspect as a Source of Testimonial Evidence: A Comparison of the English and American Approaches*, 38 HASTINGS L.J. 1 (1986).

⁷⁷² Craig M. Bradley, *Interrogation and Silence: A Comparative Study*, 27 WIS. INT’L L.J. 271, 285 (2009).

⁷⁷³ *Id.* at 297 (“[T]he ‘English warning’ as to the use of silence is a sensible rule that would advance the search for truth.”); see also Ted Sampsell-Jones, *Making Defendants Speak*, 93 MINN. L. REV. 1327, 1329 (2009). But cf. Geoffrey S. Corn, *The Missing Miranda Warning: Why What You Don’t Know Really Can Hurt You*, 2011 UTAH L. REV. 761, 762 (urging an

the English/Welsh warnings to respond to lower confession rates produced by *Miranda*-style changes in interrogation law—with the apparent effect of increasing confession rates.⁷⁷⁴ Such a change runs up against current precedent, not only in *Miranda* but arguably also the decision from a year earlier, *Griffin v. California*.⁷⁷⁵ But as Alschuler has argued in this Symposium, it might be possible to convince the Court to reconsider *Griffin* and *Miranda* and allow adverse inferences because it might permit other approaches to questioning suspects.⁷⁷⁶ Our research suggests that changes in this direction might help to undo some of *Miranda*'s harmful effects on confession and clearance rates.

C. *Recording of Custodial Interrogations*

So far we have discussed ways in which *Miranda*'s rules should be curtailed to avoid harming law enforcement. But we are obviously aware that there are competing concerns during police interrogation. At the top of the list of concerns is avoiding physical coercion or threats to obtain a confession. But *Miranda* is poorly constructed to block physical coercion, a point first made by the *Miranda* dissenters.⁷⁷⁷ Recording of interrogations promises to be far more effective in preventing mistreatment than the requirement that an officer read some warnings off of a card.⁷⁷⁸ As part of any *Miranda* reform, adding videotaping seems like it could be an important step.

Although not required by *Miranda* or any federal constitutional provision,⁷⁷⁹ videotaping appears to be increasingly common around the country. According to a recent survey, “[s]ince 2003, the number of states requiring law enforcement officers to electronically record some or all interviews conducted with suspects

additional warning that advises suspects that no adverse inference would will result from invoking the right to silence).

⁷⁷⁴ Christopher Slobogin, *Comparative Empiricism and Police Investigative Practices*, 37 N.C. J. INT’L L. & COM. REG. 321, 337 (2011).

⁷⁷⁵ 380 U.S. 609, 615 (1965) (holding that the Fifth Amendment “forbids either comment by the prosecution on the accused’s silence or instructions by the court that such silence is evidence of guilt”).

⁷⁷⁶ Alschuler, *supra* note 40, at 860 (“With a forthright, moderate incentive for cooperation in place, perhaps the deceptive stratagems could be abandoned.”); *see also* Donald Dripps, *Foreword: Against Police Interrogation—And the Privilege Against Self-Incrimination*, 78 J. CRIM. L. & CRIMINOLOGY 699 (1988).

⁷⁷⁷ *Miranda v. Arizona*, 384 U.S. 436, 505 (1966) (Harlan, J., dissenting) (“Those who use third-degree tactics and deny them in court are equally able and destined to lie as skillfully about warnings and waiver.”).

⁷⁷⁸ *See* Cassell, *supra* note 22, at 1120-22; *cf.* *Floyd v. City of New York*, 959 F. Supp. 2d 540, 558-63 (S.D.N.Y.) (requiring a trial program of body cameras as a response to concerns about stop and frisk policies of the NYPD), *on appeal*, 736 F.3d 118 (2d Cir. 2013) (requiring reassignment), *and vacated in part, remanded in part*, 743 F.3d 362 (2d Cir. 2014) (vacated in part and remanded for purpose of exploring settlement).

⁷⁷⁹ *See* Slobogin, *supra* note 47, at 1188-93 (noting that a recording is not required by *Miranda* but making arguments for how it could be).

in their custody has grown from two to at least twenty-two.”⁷⁸⁰ In addition to specific requirements that police record interviews, a growing number of police departments are requiring their officers to wear uniform-mounted body-cameras.⁷⁸¹ “Recent surveys suggest that about 25% of the nation’s 17,000 police agencies [are using video recording devices], with fully 80% of agencies evaluating the technology.”⁷⁸² As of August 2016, of the sixty-eight “major city” police departments in the United States, about forty-three have some type of body worn-camera programs in place.⁷⁸³ The Department of Justice recently awarded \$23 million in funding for a body-worn camera pilot program that will provide seventy-three police agencies in thirty-two states funding for purchase of body cameras and technical assistance.⁷⁸⁴

While the trend at the state level is very much in the direction of recording policing questioning at the federal level, the Department of Justice for many years resisted this trend and rarely recorded custodial interviews.⁷⁸⁵ Then, on May 12, 2014, the Department of Justice announced a change to its interview policy.⁷⁸⁶ The new policy establishes a presumption that statements made by

⁷⁸⁰ Harvard Law Review Ass’n, *Dep’t of Justice, New Department Policy Concerning Electronic Recording of Statements*, 128 HARV. L. REV. 1552, 1552 (2015); see also Jim Dwyer, *Unmet Pledge: Interrogations Are Not Filmed*, N.Y. TIMES, Dec. 9, 2016, at A24 (noting twenty-two states and the District of Columbia record some interrogations, but New York City has not yet met its pledge to do so). A convenient resource for tracking developments in this area is a website maintained by the National Association of Criminal Defense Lawyers. See *Recording Interrogations*, NAT’L ASS’N CRIM. DEF. LAW., <https://www.nacdl.org/recordinginterrogations> [https://perma.cc/J46B-2UUU] (last visited Feb. 14, 2017).

⁷⁸¹ See generally Kami Chavis Simmons, *Body-Mounted Police Cameras: A Primer on Police Accountability vs. Privacy*, 58 HOWARD L.J. 881 (2015).

⁷⁸² Jay Stanley, *Police Body-Mounted Cameras: With Right Policies in Place, A Win for All*, Version 2.0, ACLU (Mar. 2015), https://www.aclu.org/sites/default/files/assets/police_body-mounted_cameras-v2.pdf [https://perma.cc/ADU2-HP4V]; see also *Research on Body-Worn Cameras and Law Enforcement*, NAT’L INST. JUST. (Jan. 3, 2017), <http://www.nij.gov/topics/law-enforcement/technology/pages/body-worn-cameras.aspx> [https://perma.cc/NYK6-Z6LV] (noting that the number of police departments not using body cameras is around seventy-five percent).

⁷⁸³ *Police Body Worn Cameras: A Policy Scorecard*, LEADERSHIP CONF. (Aug. 2016), <https://www.bwcorescorecard.org/> [https://perma.cc/L89W-JHMY].

⁷⁸⁴ Office of Public Affairs, *Justice Department Awards over \$23 Million in Funding for Body Worn Camera Pilot Program to Support Law Enforcement Agencies in 32 States*, DEP’T JUST. (Sept. 21, 2015), <https://www.justice.gov/opa/pr/justice-department-awards-over-23-million-funding-body-worn-camera-pilot-program-support-law> [https://perma.cc/2ST5-X2SB].

⁷⁸⁵ See Thomas P. Sullivan, *The Department of Justice’s Misguided Resistance to Electronic Recording of Custodial Interviews*, 59 FED. LAW. 62, 63 (2012).

⁷⁸⁶ See Memorandum from James M. Cole, Deputy Attorney Gen., U.S. Dep’t of Justice, to Assoc. Att’y Gen. et al. (May 12, 2014),

individuals during custodial interviews will be electronically recorded.⁷⁸⁷ The policy also encourages agents and prosecutors to consider electronic recording in investigative or other circumstances where the presumption does not apply.⁷⁸⁸ Although the policy contains exceptions,⁷⁸⁹ this new Department of Justice policy means that recording is coming to the federal level as well.⁷⁹⁰

One reason why the Department of Justice was concerned about recording interrogations may have been the possibility that doing so might reduce confession rates. Just as there is little data in this country on confession rates, we have surprisingly little data on the effect of recording on confession rates. One of the present authors (Cassell) collected the available data on this point in a 1996 article, concluding that it did not generally appear to harm law enforcement efforts.⁷⁹¹ Since then, there has been some, largely anecdotal, empirical evidence collected on the issue.⁷⁹² One question that arises from this evidence is whether the recording equipment should be made visible to the suspect. A study of officer's experiences with recording found that visible recording equipment reduced the confession rate,⁷⁹³ and the most widely used interrogation manual accordingly recommends against making the recording device visible.⁷⁹⁴ Nonetheless, given the fact that law enforcement agencies and supporters seem to have acquiesced in (at least hidden) recording, it seems reasonable to conclude that practice will not significantly harm interrogation efforts.⁷⁹⁵

Video recording also offers one undoubted advantage over *Miranda*: It helps prevent wrongful convictions due to false confessions. While the extent of the

<http://s3.documentcloud.org/documents/1165406/recording-policy.pdf>
[<https://perma.cc/RW48-WWYW>].

⁷⁸⁷ *Id.* at 1, 2 (clarifying that “electronic recording” encourages the use of video recording to satisfy the presumption, but allowing the use of audio recording when video is unavailable).

⁷⁸⁸ *Id.*

⁷⁸⁹ See Harvard Law Review Ass’n, *supra* note 780, at 1552 (noting that the new policy fails to provide enforcement and accountability measures).

⁷⁹⁰ *Id.*

⁷⁹¹ Cassell, *supra* note 16, at 489.

⁷⁹² See, e.g., THOMAS P. SULLIVAN, NW. U. SCH. OF L. CTR. ON WRONGFUL CONVICTIONS, POLICE EXPERIENCES WITH RECORDING CUSTODIAL INTERROGATIONS 24 (2004) (reporting that officers who recorded interrogations were generally pleased with the results).

⁷⁹³ See Jayne, *supra* note 726, at 105-08 (finding that of investigators surveyed following the imposition of mandatory recording requirements during custodial interrogation, 74% believed it had not affected the number of confessions, while 22% thought it had reduced the number of confessions, and 4% thought it had increased the number of confessions). Interestingly, Jayne reported that confession rates declined when the recording equipment was visible—from 82% when recording equipment was never visible to 43% when it was always visible. *Id.*

⁷⁹⁴ INBAU ET AL., *supra* note 82, at 51.

⁷⁹⁵ See Jacobi, *supra* note 44, at 44-45; Kassir et al., *supra* note 718, at 393 (reporting that 81% of police officers surveyed favored recording interrogations).

false confession problem has sometimes been overblown,⁷⁹⁶ there is no doubt that police on rare occasions obtain a false confession.⁷⁹⁷ We have not discussed the problem elsewhere in this Article because, in terms of aggregate national crime statistics, the false confession problem is almost certainly so small as to be completely undetectable.⁷⁹⁸ But the important point for present purposes is that *Miranda* does nothing to prevent false confessions and, indeed, may place the innocent at greater risk by blocking voluntary confessions that could help exonerate them.⁷⁹⁹ A system of recording interrogations would certainly do far more than *Miranda* to protect the innocent.⁸⁰⁰ We add videotaping as part of our *Miranda* reform because it appears to offer a true “win-win”—more protection for suspects against involuntary confessions while not reducing law enforcement’s ability to obtain voluntary confessions.

D. *Renewed Focus on the Voluntariness Test*

Our tentative proposal necessarily places greater emphasis on voluntariness issues. By eliminating the waiver requirement and questioning cut-off rules (and making associated changes in the warnings), courts will necessarily have to pay more attention to whether a defendant gave not merely a “*Mirandized*” confession but also a “voluntary” confession.

⁷⁹⁶ See Paul G. Cassell, *The Guilty and the “Innocent”: An Examination of Alleged Cases of Wrongful Conviction from False Confessions*, 22 HARV. J.L. & PUB. POL’Y 523 (1999).

⁷⁹⁷ See generally Julia Carrano & Marvin Zalman, *An Introduction to Innocence Reform*, in WRONGFUL CONVICTION AND CRIMINAL JUSTICE REFORM: MAKING JUSTICE 11 (Marvin Zalman & Julia Carrano eds., 2014).

⁷⁹⁸ One back-of-the-envelope calculation to support this assertion is that the National Registry of Exonerations reports that from 1989 to 2012 it has identified about 130 cases of wrongful conviction due to false confessions. REPORT BY THE NATIONAL REGISTRY OF EXONERATIONS, EXONERATIONS IN THE U.S., 1989-2012, at 40 (2012). During that same twenty-three-year period, police arrested about 46 million people (assuming 2 million arrests/year for index crimes, see, e.g., UCR-2010 tbl.29 (reporting 2,195,000 arrests in 2010)). Assuming the exonerations all involved truly innocent persons (a debatable assumption), wrongful convictions due to false confession occur about once for every 35,000 arrests. To be sure, reported wrongful convictions are only a fraction of actual wrongful convictions. But our limited point is that it seems unlikely that false convictions leading to wrongful convictions is a regular phenomenon in day-to-day law enforcement. Of course, for those who disagree with this assertion, the point remains that those false confessions occur under the *Miranda* regime—and, indeed may be occurring more frequently because of the *Miranda* regime. See generally Paul G. Cassell, *Protecting the Innocent from False Confessions and Lost Confessions—and from Miranda*, 88 J. CRIM. L. & CRIMINOLOGY 497 (1998). We also agree that every wrongful conviction is itself a substantial cost that society should attempt to avoid.

⁷⁹⁹ *Id.* at 538-52.

⁸⁰⁰ See Paul G. Cassell, *Can We Protect the Innocent Without Freeing the Guilty? Thoughts on Innocence Reforms that Avoid Harmful Tradeoffs*, in WRONGFUL CONVICTIONS AND THE DNA REVOLUTION: TWENTY-FIVE YEARS OF INNOCENCE EXONERATIONS 16-19 (forthcoming 2017); Cassell, *supra* note 16, at 488-89.

And that is good thing. One of the clear problems with *Miranda* is that it has, in essence “become a substitute for serious voluntariness scrutiny,”⁸⁰¹ as others in this Symposium have pointed out.⁸⁰² Under the current regime, as a practical matter, courts simply adjudicate whether police have complied with *Miranda*’s warnings-and-waiver regime. If so, they readily admit the confession without much serious additional scrutiny. In this sense, *Miranda* has “practically displaced voluntariness determinations”⁸⁰³ because once a suspect has waived his *Miranda* rights, “the routinized *Miranda* ritual lulls judges into admitting confessions with little inquiry into voluntariness.”⁸⁰⁴

Our reform proposal would effectively revitalize the voluntariness test, simply by forcing courts to pay more attention to such issues. Because police questioning would not be covered by explicit waiver and questioning cut-off rules, courts would be forced to make a more searching inquiry into police conduct during interrogations whether that ultimately produced an involuntary confession.

Sometimes it is argued that courts lack the capacity to make such voluntariness determinations.⁸⁰⁵ But the simple fact of the matter is that courts routinely have to make voluntariness determinations even under the existing *Miranda* regime. Whether or not a statement was “voluntary” dictates, for example, whether a non-*Mirandized* statement can be used for impeachment purposes⁸⁰⁶ or whether the fruits of such a statement can be admitted into evidence.⁸⁰⁷

Focusing admissibility hearings on voluntariness issues would lead defense attorneys and courts to focus on substantive issues surrounding confessions rather than on procedural ones. As Bill Stuntz has powerfully written, *Miranda* was part of a Warren Court trend that “proceduralized criminal litigation, siphoning the time of attorneys and judges away from the question of the defendant’s guilt or innocence and toward the process by which the defendant was arrested, tried, and convicted.”⁸⁰⁸ Focusing more on voluntariness

⁸⁰¹ Weisselberg & Bibas, *supra* note 43, at 80.

⁸⁰² See, e.g., Alschuler, *supra* note 40, at 856.

⁸⁰³ Weisselberg, *supra* note 45, at 1595; see also Paul Marcus, *It’s Not Just About Miranda: Determining the Voluntariness of Confessions in Criminal Prosecutions*, 40 VAL. U. L. REV. 601 (2006). See generally GRANO, *supra* note 708, at 135-38 (discussing the historical meaning of the voluntariness test).

⁸⁰⁴ George C. Thomas III, *The End of the Road for Miranda v. Arizona?: On the History and the Future of the Rules for Police Interrogation*, 37 AM. CRIM. L. REV. 1, 18 (2000).

⁸⁰⁵ It is also sometimes argued that the very concept of “voluntariness” is essentially incoherent, as a powerful article by Ron Allen contends. See Ronald J. Allen, *Miranda’s Hollow Core*, 100 NW. U. L. REV. 71, 72 (2006).

⁸⁰⁶ *Harris v. New York*, 401 U.S. 222 (1971).

⁸⁰⁷ *United States v. Patane*, 542 U.S. 630 (2004).

⁸⁰⁸ WILLIAM J. STUNTZ, *THE COLLAPSE OF AMERICAN CRIMINAL JUSTICE* 228 (2011).

questions—and less on *Miranda*'s daunting number of procedural issues—is a step that should be applauded, not criticized.

Greater focus on voluntariness would allow more consideration of what sorts of psychological techniques police officers can use during questioning.⁸⁰⁹ One of the great mysteries of the *Miranda* decision is how it could so strongly condemn psychological tactics and, at the same time, do so little about them. The point was perhaps most nicely made by Liva Baker, who wrote:

The last laugh in the *Miranda* episode was not had by its author, Earl Warren . . . , but by Fred E. Inbau and John E. Reid, the authors of the interrogation manual that he quoted frequently and with disapproval Warren exposed the techniques taught in that manual and others, which enable the police to bring psychological pressures to bear on the suspect to “persuade, trick, or cajole him out of exercising his constitutional rights.” With this to recommend it, the manual became a best seller among police and a second edition had to be printed. “All but a few of the interrogation tactics and techniques presented in our earlier publication are still valid,” the authors purred in their post-*Miranda* edition, adding that all that is required to is give the warnings, get a waiver, and proceed.⁸¹⁰

Greater scrutiny of the tactics used during interrogations would be a good thing—and would not harm law enforcement efforts. The police seem likely to win the vast majority of those court challenges,⁸¹¹ because “[i]n the great majority of in-custody interrogations observed, the possibility of coercion appear[s] slight.”⁸¹² One quantifiable measure of this fact is that police questioning is generally very limited. Leo's Bay Area study in 1993 found that most interrogations lasted less than an hour.⁸¹³ Cassell and Hayman's study found that, of 86 interrogations, only 11 extended beyond 30 minutes and only 1 extended beyond an hour.⁸¹⁴ To the extent that courts give greater scrutiny of very long interrogations, as some have advocated,⁸¹⁵ that scrutiny will fall on a tiny percentage of cases—and precisely the tiny percentage of cases where most judicial time and energy should be devoted.

At the same time, however, we have concerns about broad interpretations of voluntariness rules that would dramatically change existing practices. For

⁸⁰⁹ See Slobogin, *supra* note 47, at 1164-67.

⁸¹⁰ GRAHAM, *supra* note 673, at 315-16.

⁸¹¹ THOMAS & LEO, *supra* note 671, at 210 (citing WELSH WHITE, *MIRANDA'S WANING PROTECTIONS* 122 n.40 (2001) (noting only nine cases of involuntary postwaiver interrogation out of 2000 cases)); Thomas, *supra* note 731, at 1977 (noting that the state wins ninety-six percent of voluntariness issues).

⁸¹² LAFAYE, *supra* note 677, at 386.

⁸¹³ Leo, *supra* note 57, at 279 tbl.6.

⁸¹⁴ Cassell & Hayman, *supra* note 58, at 892.

⁸¹⁵ See Eve Brensike Primus, *The Future of Confession Law: Toward Rules for the Voluntariness Test*, 114 MICH. L. REV. 1, 46-48 (2015).

example, some observers have suggested that police officers should be forbidden from engaging in deceptive practices.⁸¹⁶ A firm basis for such proposals is lacking because, while such practices may (like any other technique) produce false confessions, they also produce vastly larger numbers of truthful confessions.⁸¹⁷ Moreover, the fundamental problem with such suggestions is that they would require restricting hundreds of thousands of police interrogations every year in ways that seem likely to harm police efforts.⁸¹⁸

Similarly problematic are proposals that would forbid admissibility of confessions that do not “fit” the crime.⁸¹⁹ The problem with this approach is that, as Thomas has explained, “even ‘true’ confessions are often riddled with half-truths because suspects want to paint the most favorable picture possible.”⁸²⁰ The false confessions literature demonstrates numerous reasons why suspects might give otherwise truthful confessions that deviate (or apparently deviate) from the crime scene’s facts.⁸²¹ To be sure, research on false confessions has established that in most cases where a suspect gives a false confession, that confession will often be contradicted by crime scene or other evidence.⁸²² But the same can be said of a vastly larger number of cases where a suspect gives a *true* confession. Without taking into account the relative frequency or infrequency of false confessions to truthful confessions, it is impossible to deduce that an inconsistency in a confession is evidence of a truth or falsity.

Indeed, if anything, the available evidence suggests that it is far more likely that any confession containing inconsistencies will turn out to be a true confession rather than a false confession. To establish this point, it is only necessary to have some rough measure of the relative proportion of false confessions to true confessions. While precise quantification is impossible, the empirical literature suggests (unsurprisingly) that the great majority of confessions and incriminating statements are true.⁸²³ And, as discussed above, a

⁸¹⁶ For good overviews of this issue, see generally Jacobi, *supra* note 661; Slobogin, *supra* note 47, at 1167-68.

⁸¹⁷ See Lawrence Rosenthal, *Against Orthodoxy: Miranda Is Not Prophylactic and the Constitution Is Not Perfect*, 10 CHAP. L. REV. 579, 616 (2007).

⁸¹⁸ See Christopher Slobogin, *Lying and Confessing*, 39 TEX. TECH L. REV. 1275, 1289-90 (2007); Slobogin, *supra* note 47, at 1161.

⁸¹⁹ See, e.g., Primus, *supra* note 815, at 50-51; Julie Tanaka Siegel, Note, *Confessions in an International Age: Re-Examining Admissibility Through the Lens of Foreign Interrogations*, 115 MICH. L. REV. 277, 302-05 (2016).

⁸²⁰ George C. Thomas III, *Telling Half-Truths*, LEGAL TIMES, Aug. 12, 1996, at 20.

⁸²¹ Cassell, *supra* note 796, at 594-95.

⁸²² See, e.g., Brandon L. Garrett, *The Substance of False Confessions*, 62 STAN. L. REV. 1051, 1087 (2010).

⁸²³ See, e.g., Cassell, *supra* note 798, at 507-13; Marvin Zalman, *Qualitatively Estimating the Incidence of Wrongful Convictions*, 48 CRIM. L. BULL. 221 (2012) (surveying available empirical literature on wrongful convictions and estimating an overall trial error rate for all causes at between 0.5% and 1.0% for felony offenses).

majority of these confessions and false statements will have inconsistencies in them.

E. *Fewer Costs, More Benefits Than Miranda*

These tentative ideas we have sketched out suggest it would be possible to craft a superior alternative to *Miranda*, one that minimizes the costs to society from restrictions on law enforcement while properly protecting suspects' legitimate interests. In engaging in such cost-benefit analysis, we are doing nothing more than *Miranda*'s defenders have urged. As Kamisar wrote in 1987, striking a balance "is the way *Miranda*'s defenders—not its critics—have talked about the case for the past twenty years."⁸²⁴ Indeed, that is still the way *Miranda* is defended.⁸²⁵

The reforms that we suggest here, particularly eliminating *Miranda*'s waiver and questioning cut-off rules (and perhaps, in addition, adding an adverse inference warning) would likely increase law enforcement's ability to clear crimes and convict criminals through voluntary confessions. In considering how much of a benefit this is, the starting point must be that voluntary confessions remain an important part of law enforcement in America today. The Supreme Court has emphasized that "[a]dmissions of guilt are more than merely 'desirable'; they are essential to society's compelling interest in finding, convicting, and punishing those who violate the law."⁸²⁶ Thus, the "ready ability to obtain uncoerced confessions is not an evil but an unmitigated good." Without these confessions, crimes go unsolved and criminals unpunished. These are not negligible costs⁸²⁷

The data we review here suggest *Miranda* resulted in a loss of a substantial number of voluntary confessions, both as measured by the confession rate studies and by (as an understated second-best approach) FBI clearance rate data. While we have not attempted to fully map out the ultimate consequences of these lost confessions, there can be little doubt that they operated to produce the unsolved crimes and unpunished offenders that the Court has warned about, with significant harm to society.

⁸²⁴ Yale Kamisar, *The "Police Practice" Phases of the Criminal Process Revolution and the Three Phases of the Burger Court*, in *THE BURGER YEARS* 143, 150 (Herman Schwartz ed., 1987).

⁸²⁵ See, e.g., Yale Kamisar, *The Miranda Case Fifty Years Later*, 97 B.U. L. REV. 1293, 1300 (suggesting that the balance of power with respect to *Miranda* has been "worked out").

⁸²⁶ *Moran v. Burbine*, 475 U.S. 412, 426 (1986) (quoting *United States v. Washington*, 431 U.S. 181, 186 (1977)).

⁸²⁷ *Montejo v. Louisiana*, 556 U.S. 778, 796 (2009) (quoting *McNeil v. Wisconsin*, 501 U.S. 171, 181 (1991)); see also Ronald J. Allen, *The Misguided Defenses of Miranda v. Arizona*, 5 OHIO STATE J. CRIM. L. 205, 214 (2007) ("We should not treat the serious matter of trying to limit criminality as a high school civics lesson in which the predominate issue is to see how we can get more and more people to obstruct legitimate police investigations. Rights are wonderful things, but so, too, is the ability—dare I say "right"?—to live one's life free from the predations of individuals who have no respect for your rights.").

Turning first to clearance rates, a decline in clearance rates “signals a decline in punishment certainty and threatens to undermine deterrence principles, a key foundation of our criminal justice system.”⁸²⁸ If a crime goes uncleared, the responsible criminal is never held accountable and, to the contrary, remains free to commit further crimes. Lower clearance rates thus indicate that “the state is ineffective at insulating citizens from violent offenders, which may contribute to negative social reactions such as loss of faith in public officials, an increased sense of fear and insecurity.”⁸²⁹

Our interest in lower clearance rates, however, is only as a telltale of the resultant problem of lower confession rates. Lower clearance rates suggest lower confession rates. And confessions, in turn, are frequently needed to secure a conviction,⁸³⁰ even in this age of DNA testing and other advanced forensic science.⁸³¹ When *Miranda* blocks the police from obtaining a voluntary confession, in many cases the result will be a criminal who goes free—free, it should be noted to continue his depredations against other crime victims. And sadly, we know who those victims will be. They will disproportionately be racial minorities, residents of inner cities, the poor, and others in society who are in the weakest position to defend against crimes.⁸³²

While the focus of this Article is a quantitative one, it important to emphasize the limitations in the kind of data we explore. As Gerald Caplan has nicely explained, criminological studies “reduce crime to something remote and abstract, a string of numbers, an event that one reads about in the newspapers, something that happens in another part of town. There is no hint of rape as a nightmare come alive or robbery as a ruinous matter.”⁸³³ Too often the costs of these crimes are unduly minimized, even though efforts at quantification suggest crime victims (and their families) bear enormous burdens.⁸³⁴

To be sure, in some of its post-*Miranda* decisions, the Supreme Court appears to have been cognizant of such costs. But there is little in the data reviewed here to support the Court’s claim that “[i]f anything, our subsequent cases have reduced the impact of the *Miranda* rule on legitimate law enforcement.”⁸³⁵ The

⁸²⁸ Ousey & Lee, *supra* note 85, at 142.

⁸²⁹ *Id.*

⁸³⁰ See Cassell, *supra* note 16, at 422-37.

⁸³¹ See *supra* notes 512-27 and accompanying text.

⁸³² See JILL LEOVY, GHETTOSIDE: A TRUE STORY OF MURDER IN AMERICA 8 (2015) (discussing “failure of the law to stand up for black people when they are hurt or killed by others”); JENNIFER L. TRUMAN & RACHEL E. MORGAN, U.S. DEP’T OF JUSTICE, CRIMINAL VICTIMIZATION, 2015, at 9 tbl.7 (2016).

⁸³³ Caplan, *supra* note 716, at 1384-85.

⁸³⁴ See Paul G. Cassell, *Too Severe?: A Defense of the Federal Sentencing Guidelines (and a Critique of Federal Mandatory Minimums)*, 56 STAN. L. REV. 1017, 1033 (2004) (discussing TED R. MILLER, MARC A. COHEN & BRIAN WIERSEMA, NAT’L INST. OF JUSTICE, VICTIM COSTS AND CONSEQUENCES: A NEW LOOK (1996)).

⁸³⁵ *Berghius v. Thompson*, 560 U.S. 370, 382 (2010) (alteration in original) (quoting *Dickerson v. United States*, 530 U.S. 428, 443 (2000)).

Court's decisions have generally nibbled around the edges of the doctrine (with the possible exception of the 2010 decision in *Berghuis*,⁸³⁶ which was decided so recently as to be largely outside of the trends our regression equations measured). The most harmful features of *Miranda* have not been modified—and the harms reflected in, for example, the FBI's clearance rate data do not appear to have been mitigated.⁸³⁷

And what, then, are *Miranda*'s offsetting benefits? If many of the articles in this Symposium are to be believed, *Miranda*'s benefits are few and far between.⁸³⁸ Alschuler writes that “*Miranda* is a doctrinal failure, an ethical failure, a jurisprudential failure, and an empirical failure.”⁸³⁹ Dripps adds that “whatever rules were right fifty years ago are unlikely—extremely unlikely—to be ideal rules today or for the future.”⁸⁴⁰ Klein agrees that “[t]he *Miranda* warnings have perverse results and ought to be retired and replaced.”⁸⁴¹ David Rossman concludes that “[a]t this point in its history, . . . *Miranda* is bankrupt both intellectually and in terms of practical effect.”⁸⁴² Slobogin explains that while “*Miranda* was an attempt at giving police clear guidelines about interrogation[,] . . . [o]ther than its warnings requirement, . . . it has not done so.”⁸⁴³ And Charles Weisselberg agrees that “*Miranda* does not provide meaningful protection for the Fifth Amendment privilege.”⁸⁴⁴

But the ultimate question is not whether *Miranda* confers benefits in the abstract, but whether it is, on balance, more beneficial than other alternatives that the Court could reasonably implement. The ideas we have sketched here suggest it would be possible to craft a replacement for *Miranda* that would be a true win-win—a system in which fewer guilty criminals go free while suspects' legitimate interests during police questioning are protected. Our reform proposal would deliver warnings to suspects of their right to remain silent, much as the current system does, and would provide even stronger protections against coercion by a system of videotaping. It would also focus the attention of defense attorneys and courts on the most troubling confessions—those in which there is a genuine issue of voluntariness. Such a system would not only better protect

⁸³⁶ See *supra* notes 744-52 and accompanying text.

⁸³⁷ One measure of this fact is that in 1969 violent crime clearance rates were 45.6% while in 2010 they were 45.3%—essentially unchanged. See *supra* Figure 2.

⁸³⁸ Cf. LAWRENCE S. WRIGHTSMAN & MARY L. PITMAN, *THE MIRANDA RULING: ITS PAST, PRESENT, AND FUTURE* 172 (2010) (concluding *Miranda*'s “goals have not been achieved”).

⁸³⁹ Alschuler, *supra* note 40, at 890.

⁸⁴⁰ Dripps, *supra* note 521, at 895.

⁸⁴¹ Klein, *supra* note 734, at 1004.

⁸⁴² David Rossman, *Resurrecting Miranda's Right to Counsel*, 97 B.U. L. REV. 1129, 1131 (2017).

⁸⁴³ Slobogin, *supra* note 47, at 1195.

⁸⁴⁴ Charles D. Weisselberg, *Exporting and Importing Miranda*, 97 B.U. L. REV. 1235, 1236 (2017).

society from dangerous criminals but also better protect suspects from abusive law enforcement.

CONCLUSION

We began this Article by recalling that the dissenters in *Miranda* had warned that the decision would have social costs and that only time could tell how serious the costs would be. Has *Miranda* handcuffed the cops over the last fifty years? In this Article we have tried to assay all of the available empirical evidence on *Miranda*'s effects on law enforcement. Based on that evidence, we believe the best answer is 'yes.'

This finding should not be particularly surprising. We have shown little more than that a landmark Supreme Court decision imposing unprecedented restraints on law enforcement made law enforcement less effective. But our conclusion is an important one because it runs contrary to conventional academic opinion. And whether *Miranda* handcuffed the cops continues to be important as courts and policy makers must consider how to interpret and respond to *Miranda*'s rules.

Our conclusion rests on multiple bases, including showing substantial confession rate declines in *Miranda*'s wake as well as the FBI's clearance rate data which we analyze at length. Throughout our Article, we have tried to make clear the caveats and limitations of our findings. We do not purport to have irrefutably proven that *Miranda* handcuffed the cops. But we believe we have demonstrated that the preponderance of empirical evidence points strongly in that direction. Our findings certainly call into question the general academic belief that *Miranda* has not hampered law enforcement. We hope that this Article will lead to more research on *Miranda*'s effects on law enforcement. Given the importance of the decision, we should not have to live in an empirical desert with little information about its real-world effects.

But more broadly, if (as we suggest) *Miranda* has harmed law enforcement, extremely difficult questions arise for *Miranda*'s defenders. *Miranda* extends beyond the boundaries of the Fifth Amendment on the basis of cost-benefit prophylaxis. But how can one measure a victim's pain when a criminal escapes justice against the benefit of giving that criminal the power to stop questioning?

Miranda's defenders have worked long and hard to maintain the conventional wisdom that *Miranda* did not handcuff the cops, presumably so that they would not have to confront explicitly the costly tradeoffs that inhere in the decision. As we now observe *Miranda*'s fiftieth birthday, it is time to have a full and fair debate about the decision—about its costs, its benefits, and its alternatives. Strong empirical evidence supports the conclusion that *Miranda*'s unprecedented restrictions on law enforcement has allowed numerous criminals to escape justice. No less than many other controversial social policies, *Miranda* is not cost free. Nor is *Miranda* the only way to regulate police questioning. It is time for *Miranda*'s defenders to acknowledge these facts and begin a frank discussion about how we can do better.