One Year Post-*Bruen*: An Empirical Assessment

Eric Ruben  
*Southern Methodist University, Dedman School of Law*

Rosanna Smart  
*Rand Corporation*

Ali Rowhani-Rahbar  
*University of Washington*

Author ORCID Identifier:  
Eric Ruben: [https://orcid.org/0000-0002-6828-3284](https://orcid.org/0000-0002-6828-3284)

Recommended Citation  

This document is brought to you for free and open access by the Faculty Scholarship at SMU Scholar. It has been accepted for inclusion in Faculty Journal Articles and Book Chapters by an authorized administrator of SMU Scholar. For more information, please visit [http://digitalrepository.smu.edu](http://digitalrepository.smu.edu).
ONE YEAR POST-BRUEN: AN EMPIRICAL ASSESSMENT

Eric Ruben, Rosanna Smart & Ali Rowhani-Rahbar*

In the year after New York State Rifle & Pistol Association v. Bruen, a steady stream of highly publicized opinions struck down a wide range of previously upheld gun restrictions. Courts declared unconstitutional policies ranging from assault weapon bans to domestic abuser prohibitions to various limits on publicly carrying handguns. Those opinions can frequently be paired with others reaching the opposite conclusion. The extent to which Bruen shook up the Second Amendment landscape and has caused widespread confusion in the courts is starting to come into focus.

This Essay measures Bruen’s aftereffects by statistically analyzing a year’s worth of Second Amendment opinions. We coded more than 450 challenges for dozens of variables including both case and judge characteristics, resulting in a comprehensive post-Bruen Second Amendment dataset. The findings of our analysis provide an objective

* Associate Professor of Law, SMU Dedman School of Law; Fellow, Brennan Center for Justice at NYU School of Law.
Senior Economist, RAND Corporation; Affiliate Faculty, Pardee RAND Graduate School.
Professor of Epidemiology, University of Washington. We are grateful to Joseph Blocher, Jacob Charles, Darrell Miller, Bill Taylor, and Andrew Willinger, as well as participants in the 2023 Cooper-Walsh Colloquium at Fordham Law School and the 2023 National Research Conference for the Prevention of Firearm-Related Harms, for helpful comments on this project. Megan Haygood, Madeleine Nelson, Jared Rothenberg, and Libby Smith provided superb research assistance. This project was supported by Arnold Ventures.
One Year Post-Bruen

Basis for assessing the upheaval wrought by Bruen and highlight both unanswered questions and immense challenges for Second Amendment doctrine in the coming years.

INTRODUCTION

In District of Columbia v. Heller, the Supreme Court announced that the Second Amendment protects an individual right to keep and bear arms for private purposes like self-defense, while emphasizing that the right—like all constitutional rights—is subject to various forms of regulation. The Court did not announce any overarching test for evaluating the constitutionality of gun laws but invited such doctrinal development in the lower courts. Thereafter, in well over 1,000 opinions, doctrine took shape and seemed to solidify, with judges achieving near-uniformity regarding both methodology and outcomes. But in New York State Rifle & Pistol Association v. Bruen, the Supreme Court declared that the consensus doctrine was wrongheaded, announcing a novel and heavily originalist approach to evaluating modern gun laws. Bruen gave the Second Amendment a second wind, and thus set up a remarkable “natural experiment”: How does a dramatic methodological overhaul affect constitutional litigation and success rates?

Legal scholarship after Bruen has focused primarily on analyzing the Supreme Court’s historical-analogical test. Bruen cast aside a conventional methodological approach that combined textual and historical analysis with consideration of contemporary costs and benefits, instead announcing that Second Amendment decisions should be based solely on textual and historical analyses. Particularly, the Supreme Court

2 See N.Y. State Rifle & Pistol Ass’n v. Bruen, 142 S. Ct. 2111, 2125 (2022) (“[T]he Courts of Appeals have coalesced around a ‘two-step’ framework for analyzing Second Amendment challenges that combines history with means-end scrutiny.”); id. at 2174 (Breyer, J., dissenting) (“[E]very Court of Appeals to have addressed the question has agreed on a two-step framework for evaluating whether a firearm regulation is consistent with the Second Amendment.”).
4 Bruen, 142 S. Ct. at 2127 (“Despite the popularity of this two-step approach, it is one step too many.”).
5 Id. (“[H]eller and McDonald do not support applying means-end scrutiny in the Second Amendment context. Instead, the government must affirmatively prove that its firearms
indicated that the government must point to analogous regulations from the era of the Second Amendment’s enactment in 1791, or from the era of the Fourteenth Amendment’s enactment in 1868, to justify the constitutionality of modern-day gun regulations.\(^6\) Scholarship has compared \textit{Bruen}’s “originalism-by-analogy” with existing originalist approaches,\(^7\) assessed \textit{Bruen}’s departure from other constitutional rights doctrines,\(^8\) critiqued \textit{Bruen}’s test as underspecified,\(^9\) and taken issue with \textit{Bruen}’s reading of the historical record.\(^10\)

But \textit{Bruen} also offers a unique opportunity for empirical legal analysis. Within days of \textit{Bruen}, on Westlaw, red flags accompanied nearly every post-\textit{Heller} Second Amendment case, a warning that those decisions were no longer good law.\(^11\) And litigants ranging from individual gun owners to criminal defendants to gun rights advocacy groups heeded that signal, bringing challenge after challenge, leading to 326 Second Amendment opinions ruling on 464 claims in the span of one year. \textit{Bruen} effectively

---

\(^6\) Id. at 2131–34. Justice Amy Coney Barrett wrote a concurring opinion to emphasize that the majority did not resolve the proper temporal focus for \textit{Bruen}’s historical-analogical test. Id. at 2162–63 (Barrett, J., concurring). Lower court judges have diverged on this point. Compare Nat’l Rifle Ass’n v. Bondi, 61 F.4th 1317, 1322 (11th Cir.), reh’g en banc granted, opinion vacated, 72 F.4th 1346 (11th Cir. 2023) (“[H]istorical sources from the Reconstruction Era are more probative of the Second Amendment’s scope than those from the Founding Era.”), with United States v. Price, 635 F. Supp. 3d 455, 460 (S.D.W. Va. 2022) (“[The Second Amendment] analysis is constrained by the Supreme Court’s definition of ‘historical tradition’ as the time of the founding and ratification of the Second Amendment in 1791.”).


\(^8\) See, e.g., Timothy Zick, Second Amendment Exceptionalism: Public Expression and Public Carry, 102 Tex. L. Rev. 65, 67 (2023) (rejecting Supreme Court’s claim that \textit{Bruen}’s approach comports with First Amendment free-speech doctrine).


\(^11\) See Blocher & Ruben, Originalism-by-Analogy, supra note 7, at 114 n.80.
restated the Second Amendment litigation clock, and the resulting
opinions make up a discrete data source.

This Essay analyzes that data to take an initial measurement of the post-
Bruen world.\textsuperscript{12} Doing so at this early stage has a key benefit of capturing
judicial work from first principles. Many empirical legal analyses focus
solely on appellate cases.\textsuperscript{13} But we see value in providing a snapshot of
the first judicial attempts to implement Bruen, before appellate precedent
builds up and stare decisis crowds out the sort of historical-analogical
reasoning Bruen mandates.\textsuperscript{14} Bruen places novel and, in many ways,
extraordinary demands on trial courts, including the evaluation of
centuries of historical evidence. Now is a good time to take stock of the
consequences of announcing such a new Second Amendment test by
assessing the relationship between case characteristics, judge
characteristics, and success rates, and then comparing our findings with
pre-Bruen statistics.

Of course, empirical legal analysis has well-known limitations and
cannot answer all questions about evolving Second Amendment doctrine.
Setting outcomes as the dependent variable and omitting deeper
consideration of the reasoning judges provide for those outcomes omits a
key aspect of the judicial process.\textsuperscript{15} Moreover, codable proxies for
multitudinous concepts such as using the party of nominating president

\textsuperscript{12} We join one other published empirical analysis conducted after Bruen. See Charles, supra
note 9. Our results corroborate Charles’s excellent qualitative analysis and build on it by
including state opinions, additional variables including attitudinal variables, and more
advanced statistical analysis. As with any comparison of empirical studies, it is important to
keep in mind methodological differences. One worth mentioning because it affects our overall
claim count is that we separated claims more granularly, for example, by separately counting
each challenge to different sensitive places within a single opinion. Cf. id. at 124 n.346
(grouping claims by topic rather than separating out each individual provision).

\textsuperscript{13} See, e.g., Adam M. Samaha & Roy Germano, Is the Second Amendment a Second-Class

\textsuperscript{14} As Justice Benjamin Cardozo put it, precedent “fix[es] the point of departure from which
the labor of the judge begins.” Benjamin N. Cardozo, The Nature of the Judicial Process 20
(1921); see also Amy Coney Barrett & John Copeland Nagle, Congressional Originalism, 19
originalists.”).

\textsuperscript{15} See H. Jefferson Powell, A Response to Professor Knight, Are Empiricists Asking the
the importance of considering “[t]he form and content of the judicial opinion” in addition to
outcomes).
for ideology\textsuperscript{16} or using a binary “relief granted at least in part” for “success” overlook finer distinctions. And, of course, stopping our data collection at the one-year mark after \textit{Bruen} necessarily omits developments after that cut-off point. Similar drawbacks inhere in all legal empirical projects, and ours should be qualified accordingly.

We nonetheless believe empirical legal studies are valuable for raising questions about constitutional litigation, and Second Amendment litigation in particular, even if they do not always point to obvious answers. They can “help[] inform litigants, policymakers, and society as a whole about how the legal system works.”\textsuperscript{17} And this is especially so in the Second Amendment context in light of \textit{Bruen}’s extraordinary doctrinal upheaval and the pending Second Amendment case before the Supreme Court, \textit{United States v. Rahimi}.\textsuperscript{18} An express rationale in \textit{Bruen} for prescribing a new test of historical analogy was to make the doctrine “more administrable” than conventional means-ends scrutiny.\textsuperscript{19} The majority dismissed as “unpersua[sive]” the dissent’s complaint that historical analogy would be difficult to apply by lower court judges, who would, at worst, rely on their policy preferences to make decisions.\textsuperscript{20} Analyzing post-\textit{Bruen} outcomes in similar cases is one way to test whether the early returns support the \textit{Bruen} majority’s rejection of the dissent’s concerns.

And, indeed, our analysis demonstrates \textit{Bruen}’s seismic impact. The pace of litigation after the opinion has far surpassed the tremendous pace of litigation after \textit{Heller}.\textsuperscript{21} And litigants have good reason for alacrity: the success rate of Second Amendment claims also far surpasses the post-\textit{Heller} success rate.\textsuperscript{22} But readily apparent fault lines, and widespread inconsistencies, have also emerged.\textsuperscript{23} Judicial ideology is one explanation for discrepancies, as a statistically significant gap exists between the rate that Republican- and Democratic-nominated judges grant Second

\textsuperscript{17} Theodore Eisenberg, Why Do Empirical Legal Scholarship?, 41 San Diego L. Rev. 1741, 1741 (2004).
\textsuperscript{18} United States v. Rahimi, 61 F.4th 443 (5th Cir. 2023), \textit{cert. granted}, 143 S. Ct. 2688 (2023) (No. 22-915).
\textsuperscript{19} N.Y. State Rifle & Pistol Ass’n v. Bruen, 142 S. Ct. 2111, 2130 (2022).
\textsuperscript{20} Id. at 2130 n.6; id. at 2179–80 (Breyer, J., dissenting).
\textsuperscript{21} See infra Section II.A.
\textsuperscript{22} See infra Section II.B.
\textsuperscript{23} See infra Section II.C.
Amendment relief.\textsuperscript{24} Other factors, such as the type of law being challenged, also matter, with challenges to sensitive place restrictions having a particularly high likelihood of success.\textsuperscript{25} Still, our findings suggest that \textit{Bruen} has not meaningfully constrained judges—indeed, judicial ideology is predictive of outcomes after \textit{Bruen}, even when taking into account other case characteristics.

This Essay proceeds in three Parts. Part I describes our methodology. Part II presents our data and offers a descriptive analysis. Part III reports the results of our regression analysis.

\section*{I. METHODOLOGY}

Our goal was to evaluate every Second Amendment challenge in every Second Amendment opinion—state, federal, trial, and appellate—issued between \textit{Bruen} and \textit{Bruen}’s one-year anniversary.\textsuperscript{26} To do so, we created searches in Westlaw for opinions including the terms “\textit{Bruen}” and “Second Amendment.”\textsuperscript{27} Our decision to include state court opinions was driven by the fact that most Second Amendment litigation before \textit{Bruen} occurred in state, not federal, courts,\textsuperscript{28} yet most Second Amendment empirical work focuses solely on federal cases.\textsuperscript{29} However, our subset of

\textsuperscript{24} See infra Section II.D.

\textsuperscript{25} See infra Part III.

\textsuperscript{26} Our analysis proceeds at the challenge, not opinion level, given that courts frequently rule on various challenged policies within a single opinion—upholding some gun-free zone designations and striking down others, for example.

\textsuperscript{27} We began coding opinions in mid-March 2023. As a result, to carry our data through to \textit{Bruen}’s one-year anniversary on June 23, 2023, we ran a search twice—in mid-March and in late June. The precise searches were:

\begin{itemize}
\item advanced: “second amendment” & “bruens” & DA(aft 06-23-2022 & bef 03-14-2023)
\item advanced: “second amendment” & “bruens” & DA(aft 03-14-2023 & bef 06-23-2023)
\end{itemize}

To capture opinions that include “Second and Fourteenth Amendments” but not “Second Amendment,” we ran an additional search for:

\begin{itemize}
\item advanced: “second #and fourteenth amendments” & “bruens” & DA(aft 06-23-2022 & bef 06-23-2023)
\end{itemize}

The 2018 study that we use as a reference for comparing post-\textit{Bruen} case law with pre-\textit{Heller} case law used a search that differed in some respects, including capturing opinions that did not include reference to \textit{Heller} but did include reference to “arms” or “firearm.” Ruben & Blocher, From Theory to Doctrine, supra note 3, at 1457 & n.111. In part, this was because the date range for the 2018 study spanned about eight years, and some of the later opinions in that date range did not reference \textit{Heller}. We did not anticipate a similar issue for the immediate post-\textit{Bruen} opinions, which we assumed would mention “\textit{Bruen}.”

\textsuperscript{28} Id. at 1473.

\textsuperscript{29} See, e.g., Michael P. O’Shea, The Steepness of the Slippery Slope: Second Amendment Litigation in the Lower Federal Courts and What It Has to Do with Background
state trial court opinions was clearly incomplete—just nine opinions, all out of New York, which was less than the number of state appellate opinions. As a result, we omitted state trial court opinions from our analysis.

Our initial data pull was overbroad, so student research assistants scrubbed the list of opinions for false positives—those opinions that did not involve a Second Amendment analysis.30 Deciding on what counts as a false positive is complicated by the numerous ways in which Second Amendment questions arise and get decided.31 Coders deployed an approach to culling false positives comparable to the approach deployed in the post-\textit{Heller} analysis that was our primary comparator.32 Coders also passed through the opinions to code basic case-caption and judicial information, such as whether the opinion was issued by a state or federal court and, for federal judges, the party of the nominating president.33

The coders then closely reviewed each opinion to populate other variables, including whether the case was civil or criminal; if civil, whether the litigant raising the Second Amendment challenge was an organizational plaintiff;34 the category of the challenged policies;35 the

---


31 See Ruben & Blocher, \textit{From Theory to Doctrine}, supra note 3, at 1461–62 (“Judicial opinions decide Second Amendment questions with varying degrees of definiteness, making it difficult to craft a set of rules that would encompass every scenario.”).

32 See id. at 1460–62. False positives included cases dismissed on justiciability or procedural grounds, as well as cases that did not include a Second Amendment analysis for another reason, such as those remanded for further hearings in light of \textit{Bruen}.

33 The coders looked for the nominating president for the judge’s post at the time of coding.

34 For civil cases with multiple plaintiffs, we asked whether any of the plaintiffs was an organization. If the answer was “yes,” we coded the opinion as having an organizational plaintiff.

35 We split claims into eight categories and 81 subcategories.
outcome,\textsuperscript{36} and whether the case cited to \textit{Heller}’s list of “presumptively lawful” regulations.\textsuperscript{37}

Intercoder reliability was tested by recoding a 13-percent subset of opinions initially coded by a different coder. We then compared the answers, which had greater than 90-percent agreement across all variables. If inconsistencies became apparent when analyzing the data, we would ask research assistants to take a second look at the seemingly inconsistent data points and recode if necessary. In addition, we compared our list of federal district court “successes” with the similar list created by Jacob Charles for his analysis.\textsuperscript{38} This review revealed substantial overlap. Coders took a closer look at any discrepancies and adjusted our case coding if warranted. Even with these processes in place, which go beyond the precautions customarily taken in empirical legal projects\textsuperscript{39}, errors are inevitable. Our analysis strives for an “appropriate level of modesty.”\textsuperscript{40}

After coding the Second Amendment challenges, we conducted descriptive statistics, bivariate tests, and regression analyses to quantitatively analyze the results and identify patterns and characteristics associated with higher likelihood of litigation success. We first provide distributional information on the characteristics of the provisions that have been challenged in the first year after \textit{Bruen}, and those that have been granted relief in part or in full, using chi-squared tests to assess the extent to which different characteristics are significantly associated with differential likelihood of litigation success.\textsuperscript{41} We then conduct a series of

\textsuperscript{36} Similar to our comparator study, we counted as a “success” any outcome by which the requested Second Amendment relief was granted in whole or in part. See Ruben & Blocher, From Theory to Doctrine, supra note 3, at 1462.

\textsuperscript{37} District of Columbia v. Heller, 554 U.S. 570, 626–27 & n.26 (2008). \textit{Heller} referred to these “presumptively lawful” regulations as “longstanding.” Id. To determine if a case cited to this passage, coders searched each opinion in the dataset for the term “longstanding,” and then confirmed whether the term “longstanding” appeared in reference to Heller’s discussion.

\textsuperscript{38} See Charles, supra note 9, at 127.

\textsuperscript{39} See Hall & Wright, supra note 30, at 112 (observing that fewer than 15 percent of systematic reviews include statistical testing for intercoder reliability).

\textsuperscript{40} Harry T. Edwards & Michael A. Livermore, Pitfalls of Empirical Studies that Attempt to Understand the Factors Affecting Appellate Decisionmaking, 58 Duke L.J. 1895, 1966 (2009) (“In order for empirical scholarship to serve its highest function, it is of the utmost importance that scholars in this field acknowledge the limits of their research and maintain an appropriate level of modesty in their claims.”).

\textsuperscript{41} Statistical significance is reported using probability values, or \textit{p}-values. A commonly accepted threshold for statistical significance is \textit{p} < 0.05. See generally Guido W. Imbens, Statistical Significance, \textit{p}-Values, and the Reporting of Uncertainty, 35 J. Econ. Persps. 157 (2021) (describing \textit{p}-values).
multivariate regression analyses to test for significant associations between claim characteristics and the probability that a challenge is granted relief.

Finally, given the observed variation in post-Brue case law outcomes, we assess the extent to which judge-specific variables have additional predictive value. For cases heard in federal district courts, we expand our previous regression to incorporate attitudinal variables such as the party of the appointing president and the identity of the appointing president, as well as the judge’s ABA rating. For federal appellate cases, we disaggregate panel outcomes into judge votes and then focus on descriptive analysis given the small sample size (n=54), which precludes meaningful regressions.

II. DESCRIPTIVE ANALYSIS

Our final dataset included 326 opinions involving 464 challenges. Of those challenges, 21 percent (98/464) were successful, meaning that requested relief was granted at least in part. In this Part, we provide a snapshot of Second Amendment litigation in the year after Brue, which we compare to the most comprehensive post-Heller study.42 We then analyze characteristics of successful and unsuccessful challenges. Our analysis is at the challenge (or claim) level, not the opinion level. When we report opinion-level data, we make that explicit.
Table 1. Descriptive Statistics on Challenges in the First Year Following Bruen

<table>
<thead>
<tr>
<th>Jurisdiction</th>
<th>All challenges</th>
<th>Federal district</th>
<th>Federal appellate</th>
</tr>
</thead>
<tbody>
<tr>
<td>n</td>
<td>% granted relief</td>
<td>Chi-squared p-value</td>
<td>n</td>
</tr>
<tr>
<td>All</td>
<td>464</td>
<td>21%</td>
<td>420</td>
</tr>
<tr>
<td>Jurisdiction</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Federal</td>
<td>434</td>
<td>21%</td>
<td>420</td>
</tr>
<tr>
<td>State</td>
<td>30</td>
<td>17%</td>
<td>0</td>
</tr>
<tr>
<td>1st Circuit</td>
<td>7</td>
<td>0%</td>
<td>7</td>
</tr>
<tr>
<td>2nd Circuit</td>
<td>67</td>
<td>57%</td>
<td>67</td>
</tr>
<tr>
<td>3rd Circuit</td>
<td>50</td>
<td>62%</td>
<td>48</td>
</tr>
<tr>
<td>4th Circuit</td>
<td>45</td>
<td>4%</td>
<td>45</td>
</tr>
<tr>
<td>5th Circuit</td>
<td>52</td>
<td>15%</td>
<td>50</td>
</tr>
<tr>
<td>6th Circuit</td>
<td>27</td>
<td>4%</td>
<td>27</td>
</tr>
<tr>
<td>7th Circuit</td>
<td>40</td>
<td>13%</td>
<td>37</td>
</tr>
<tr>
<td>8th Circuit</td>
<td>34</td>
<td>6%</td>
<td>30</td>
</tr>
<tr>
<td>9th Circuit</td>
<td>63</td>
<td>3%</td>
<td>62</td>
</tr>
<tr>
<td>10th Circuit</td>
<td>27</td>
<td>15%</td>
<td>26</td>
</tr>
<tr>
<td>11th Circuit</td>
<td>20</td>
<td>0%</td>
<td>19</td>
</tr>
<tr>
<td>D.C. Circuit</td>
<td>2</td>
<td>0%</td>
<td>2</td>
</tr>
<tr>
<td>Civil or criminal case</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Civil</td>
<td>150</td>
<td>55%</td>
<td>138</td>
</tr>
<tr>
<td>Criminal</td>
<td>314</td>
<td>5%</td>
<td>282</td>
</tr>
<tr>
<td>Plaintiff (among civil cases)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Organizational</td>
<td>57</td>
<td>63%</td>
<td>54</td>
</tr>
<tr>
<td>Individual</td>
<td>93</td>
<td>49%</td>
<td>84</td>
</tr>
<tr>
<td>Trial or appellate</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trial</td>
<td>420</td>
<td>21%</td>
<td>84</td>
</tr>
<tr>
<td>Appellate</td>
<td>44</td>
<td>18%</td>
<td>0</td>
</tr>
<tr>
<td>Cite Heller</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cites Heller</td>
<td>297</td>
<td>19%</td>
<td>282</td>
</tr>
<tr>
<td>Type of law challenged</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Public carry</td>
<td>39</td>
<td>33%</td>
<td>25</td>
</tr>
<tr>
<td>Who restrictions</td>
<td>232</td>
<td>6%</td>
<td>215</td>
</tr>
<tr>
<td>What restrictions</td>
<td>48</td>
<td>23%</td>
<td>47</td>
</tr>
<tr>
<td>Where restrictions</td>
<td>81</td>
<td>69%</td>
<td>79</td>
</tr>
<tr>
<td>When restrictions</td>
<td>14</td>
<td>0%</td>
<td>14</td>
</tr>
<tr>
<td>Purchase restrictions</td>
<td>27</td>
<td>7%</td>
<td>25</td>
</tr>
<tr>
<td>Official action</td>
<td>23</td>
<td>4%</td>
<td>15</td>
</tr>
</tbody>
</table>

A. Remarkable Pace of Litigation

From October 2022, after an initial ramp-up, through May 2023, the last full month of our study period, courts issued an average of 32 opinions and addressed an average of 48 challenges per month. This is a remarkable uptick in litigation compared to the post-Heller period from
2009 through 2015, when courts addressed an average of 154 challenges per year. More Second Amendment claims were addressed in a single calendar year following Bruen than from 2009 through 2011, the first three full years after Heller. Federal trial courts addressed 420 claims in the post-Bruen year, roughly equivalent to the number of Second Amendment claims addressed by district courts from 2008 through 2014. Our coding did not allow us to measure how many cases leading to post-Bruen opinions were filed before Bruen (and, perhaps, held pending the outcome in Bruen) or were prepared in anticipation of the widely-expected outcome in Bruen. It is also too soon to tell whether the rapid pace of Second Amendment litigation post-Bruen will decrease if judicial consensus develops about the strength or weakness of specific types of challenges.

Figure 1. Second Amendment Challenges by Opinion Month

---

43 Ruben & Blocher, From Theory to Doctrine, supra note 3, at 1487.
44 Id.
45 Id. (reporting 423 claims decided in federal trial courts from mid-2008 through 2014).
B. Differential Patterns Across Jurisdictions and Claim Types

Most challenges in our dataset are in federal courts (434; 94 percent), in particular in federal trial courts (420; 91 percent), and involve criminal claims (314; 68 percent). The breakdown of civil versus criminal challenges is consistent with litigation trends after *Heller*.47 Drilling down into the data with an eye toward success rates, however, reveals important differences.

When considering jurisdiction, a notable trend after *Heller* was that litigation was concentrated in the jurisdictions known for stronger gun laws, like the Fourth Circuit (including Maryland), Ninth Circuit (including California), and the D.C. Circuit.48 After *Bruen*, however, the deluge of challenges has spread fairly diffusely, with more challenges in federal courts within the Fifth Circuit (Louisiana, Mississippi, and Texas), for example, than within the Fourth. While state policies within the Fifth Circuit are relatively lax,49 it may be that advocates desiring to challenge federal policies that withstood judicial scrutiny before *Bruen* are choosing to litigate in a conservative court hoping for a favorable audience.50

Success rates, meanwhile, have not been as evenly distributed and differ from Circuit to Circuit. The highest success rates for federal-court challenges thus far have been within the Second and Third Circuits, where sought relief has been granted in full or in part at least 50 percent of the

47 Ruben & Blocher, From Theory to Doctrine, supra note 3, at 1478 (showing 64 percent of claims after *Heller* were criminal).
48 Id. at 1474–75.
time. That compares to a 15-percent success rate, for example, within the Fifth Circuit.\textsuperscript{51}

The high success rates within the Second and Third Circuits may be skewed by outlier challenges. For example, one case brought in federal district court in New York, \textit{Antonyuk v. Hochul}, challenged over a dozen provisions of a post-\textit{Bruen} law passed in New York, the Concealed Carry Improvement Act.\textsuperscript{52} That single case led to two opinions and 49 separate challenges in our dataset, 34 of which had success.\textsuperscript{53} Similarly, in district court in New Jersey, \textit{Koons v. Platkin} involved three related opinions and 31 separate challenges to New Jersey’s post-\textit{Bruen} sensitive places law, 27 of which had success.\textsuperscript{54} If we exclude those challenges, variations in success rates across courts in different federal Circuits are no longer statistically significant (p=0.14), and the success rate drops from 57 percent to 22 percent (4/18) within the Second Circuit and from 62 percent to 12 percent (2/17) within the Third Circuit.

\textsuperscript{51} The successes within the Fifth Circuit are highly impactful, however, including the controversial decision in \textit{Rahimi} striking down a federal law restricting gun possession by those subject to domestic violence restraining orders, which the Supreme Court will consider in the 2023–2024 Term. United States v. Rahimi, 61 F.4th 443 (5th Cir. 2023), \textit{cert. granted}, 143 S. Ct. 2688 (2023) (No. 22-915).


\textsuperscript{53} See id. (deciding preliminary injunction motion); \textit{Antonyuk v. Hochul}, 635 F. Supp. 3d 111 (N.D.N.Y. 2022) (deciding temporary restraining order motion).

Comparing criminal and civil cases shows a clear divide in success rates for criminal versus civil litigants, with civil litigants significantly more likely to be granted relief. Interestingly in light of the overall jump in success for Second Amendment challenges post-\textit{Bruen}, the success rate for criminal cases after \textit{Bruen} has been just 5 percent, slightly below the 6-percent success rate in criminal cases after \textit{Heller}.\textsuperscript{55} The overall success rate in civil cases after \textit{Heller} was 15 percent, with 30-percent, 3-percent, and 14-percent success rates in federal appellate court, state appellate court, and federal trial court, respectively.\textsuperscript{56} In the year after \textit{Bruen}, the overall success rate for civil cases jumped to 55 percent, with 67-percent, 22-percent, and 57-percent success rates in federal appellate court, state appellate court, and federal trial court, respectively. Our sample size of civil federal appellate challenges was three, too small for drawing conclusions regarding that subset.

\textsuperscript{55} Ruben & Blocher, From Theory to Doctrine, supra note 3, at 1478.

\textsuperscript{56} Id.
After *Heller*, there was a marked difference in success rate depending on whether a plaintiff was an individual or organization. In the federal trial courts, individual plaintiffs had a 9-percent success rate, compared to 28 percent if at least one plaintiff was an organization.\(^{57}\) The success rates for individual and organizational plaintiffs rose in the year after *Bruen*. Individual plaintiffs in federal trial courts succeeded 51 percent of the time, a statistically comparable success rate to the 65-percent success rate when an organization was a plaintiff.

**C. Areas of Second Amendment Success and Disuniformity**

Not all Second Amendment challenges are created equal; some are objectively weak. For example, the Supreme Court blessed restrictions on gun possession by felons in *Heller*, and there is reason to conclude that *Heller’s* blessing carried through to *Bruen*.\(^{58}\) Challenging a felon-in-possession law is thus plausibly weaker than challenging restrictions not

---

\(^{57}\) Id. at 1480.

\(^{58}\) See infra notes 89–90 and accompanying text.
explicitly approved by the Supreme Court. We divided challenges into eight categories, and then further separated them into 81 subcategories.\textsuperscript{59}

Figure 4. Post-\textit{Bruen} Litigation, Policy Type

The largest category of challenges (232/464) was to “who” restrictions: bans on gun possession by particular categories of people such as those with felony convictions or who have been involuntarily committed. Overall, such challenges did not fare well—a success rate of 6 percent—though that is still better than the 4-percent success rate following \textit{Heller}.\textsuperscript{60} Within the category of “who” challenges, felons comprised the largest subcategory (156/232), or 34 percent of the entire dataset (156/464). That is higher than the comparable ratio from after \textit{Heller} (24 percent).\textsuperscript{61} Challenges to felon restrictions succeeded just once in the year after \textit{Bruen}.\textsuperscript{62}

\textsuperscript{59} One category of firearm regulation, “how” restrictions like safe storage requirements, did not garner any Second Amendment opinions during our date range, and is thus not included in Figure 4. See infra note 86 and accompanying text (discussing the surprising omission of opinions addressing “how” restrictions).

\textsuperscript{60} Ruben & Blocher, From Theory to Doctrine, supra note 3, at 1481.

\textsuperscript{61} Id.

\textsuperscript{62} Nonetheless, this trend requires qualification. \textit{Range v. Attorney General}, 69 F.4th 96 (3d Cir. 2023) (en banc), opened the door to successful as-applied challenges to the federal felon-
In June 2023, as noted above, the Supreme Court granted certiorari in *United States v. Rahimi*.63 A unanimous panel of the U.S. Court of Appeals for the Fifth Circuit declared unconstitutional the federal law disarming those subject to domestic violence restraining orders,64 an outcome also reached by district court judges in Texas and Kentucky.65 Those three successes can be paired with seven decisions denying relief under the Second Amendment for an overall success rate of 30 percent (3/10). Though this success rate is low, it is nonetheless notable given that every court to consider this policy found it constitutional before *Bruen*.66

The Fifth Circuit’s *Rahimi* opinion may raise questions about a related subcategory of “who” restrictions: bans on gun possession by domestic violence misdemeanants.67 Some scholars have questioned whether disarming someone convicted of a domestic violence misdemeanor, as opposed to a felony, is consistent with the American regulatory tradition that is at the center of the post-*Bruen* analysis.68 In *Rahimi*, the Fifth Circuit cited to such scholarship in the course of explaining its reasoning.69 Challenges to prohibitions on gun possession for domestic violence misdemeanants overwhelmingly failed after *Bruen*, with a success rate of 9 percent (1/11). The sole case marked as partially successful involved a defendant winning a motion to withdraw a guilty plea and reset the matter for a new trial because it was at least “plausible” after *Bruen* that the federal bar on gun possession for domestic violence misdemeanants was unconstitutional.70 In the same opinion, however, the in-possession law within the Third Circuit after our study period. See, e.g., United States v. Quailes, No. 21-cr-00176, 2023 WL 5401733, at *1 (M.D. Pa. Aug. 22, 2023). We have also seen successful challenges to the felon disqualifier outside the Third Circuit. See, e.g., United States v. Bullock, 18-cr-00165, 2023 WL 4232309, at *2 (S.D. Miss. June 28, 2023).

63 See supra note 18 and accompanying text.
64 See United States v. Rahimi, 61 F.4th 443, 448 (5th Cir. 2023).
66 See Blocher & Ruben, Originalism-by-Analogy, supra note 7, at 106–07.
68 See, e.g., David B. Kopel & Joseph G. S. Greenlee, The Federal Circuits’ Second Amendment Doctrines, 61 St. Louis U. L.J. 193, 244 (2017) (“[T]here is simply no tradition—from 1791 or 1866—of prohibiting gun possession (or voting, jury service, or government service) for people convicted of misdemeanors or subject to civil protective orders.”).
69 See *Rahimi*, 61 F.4th at 460 n.11 (citing scholarship casting doubt on the historical legacy of disarming domestic violence misdemeanants).
70 United States v. Bernard, No. 22-cr-00003, 2022 WL 17416681, at *4 (N.D. Iowa Dec. 5, 2022) (“The question here is whether he can make a plausible challenge to the constitutionality of the statute of conviction. His argument is plausible, especially given the
court denied the defendant’s motion to dismiss the charge, “join[ing] every other court thus far in addressing Section 922(g)(9) in finding it constitutional,” even after *Bruen*.  

Other “who” restrictions that stand out after *Bruen* are those based on age, which account for five challenges in our dataset. Such restrictions typically bar carrying or possessing a firearm for those younger than 21 years of age, and litigants generally attempt to vindicate the rights of disarmed young adults—those between 18 and 20 years of age. Sixty percent (3/5) of those challenges had success, compared to a 0-percent success rate after *Heller*.  

Perhaps no category of law has attracted more scrutiny after *Bruen* than sensitive places restrictions. In *Bruen*, the Supreme Court struck down a concealed carry permitting policy, but in the course of doing so the majority emphasized the continued constitutionality of “modern regulations prohibiting the carry of firearms in new and analogous sensitive places” to those that existed historically. Shortly after the opinion came down, New York responded with the Concealed Carry Improvement Act that established twenty categories of places as gun-free zones. In addition, the law provided that private property is presumptively gun-free unless the property owner or lessee has expressly permitted guns. In due course, the new restrictions were challenged and many of them were declared unconstitutional. As we write, that litigation remains pending in the Second Circuit Court of Appeals. New Jersey, following New York’s example, enacted their own sensitive places laws,
prompting yet more litigation that is pending in the Third Circuit Court of Appeals.\footnote{See Docket, Koons v. Att’y Gen. N.J., No. 23-1900 (3d Cir.). Other states have followed suit after our study period. See, e.g., Brian Witte, New Maryland Laws Take Effect; Injunction Blocks Gun Safety Law, WBAL-TV (Oct. 1, 2023, 5:13 PM), https://www.wbaltv.com/article/new-laws-maryland-october-2023-gun-control/45359976# [https://perma.cc/6T2S-X5RX].}

In the years after \textit{Heller}, sensitive places policies made up a tiny fraction of the overall litigation—just 4 percent.\footnote{See Ruben & Blocher, From Theory to Doctrine, supra note 3, at 1483. Moreover, the post-\textit{Heller} litigation included several zoning lawsuits in addition to litigation over gun-free zones. Id. app. C at xxvi, https://dlj.law.duke.edu/wp-content/uploads/sites/2/2018/04/Ruben-and-Blocher-App-C-1.pdf [https://perma.cc/BUN4-P5F6].} After \textit{Bruen}, however, such challenges account for 17 percent (81/464) of the dataset. Moreover, while the challenges in this category succeeded 18 percent of the time after \textit{Heller}, they succeeded 69 percent (56/81) of the time in our post-\textit{Bruen} dataset. As described above, this figure is partially explained by voluminous litigation in New York and New Jersey.\footnote{See supra notes 52–54, 76–77 and accompanying text.}

Another area of public carry litigation involves permitting policies. Challenges to permitting policies had a 33-percent success rate (13/39) during the study period, compared to a 9-percent success rate in the years after \textit{Heller}.\footnote{Ruben & Blocher, From Theory to Doctrine, supra note 3, at 1483.} Four of the 13 successes were to good or proper cause requirements of the sort struck down in \textit{Bruen}. Excluding those challenges, the success rate drops to 26 percent (9/35). No court held that public carry permitting was per se unconstitutional, which is consistent with guidance in \textit{Bruen} that “shall-issue licensing regimes are constitutionally permissible.”\footnote{N.Y. State Rifle & Pistol Ass’n v. Bruen, 142 S. Ct. 2111, 2162 (2022) (Kavanaugh, J., concurring); id. at 2138 n.9 (majority opinion).} Nor did any court strike down training or character reference requirements. In contrast, one court granted relief regarding requirements that applicants disclose their cohabitants and social media accounts.\footnote{See, e.g., Antonyuk v. Hochul, 639 F. Supp. 3d 232, 307–11, (N.D.N.Y. 2022); Antonyuk v. Hochul, 635 F. Supp. 3d 111, 136 (N.D.N.Y. 2022).}

Restrictions on weapon categories, one of the most contested policy areas since \textit{Heller}, comprised 10 percent (48/464) of the dataset and had a 23 percent (11/48) success rate. This outpaced the 13-percent success rate from the years after \textit{Heller}.\footnote{Ruben & Blocher, From Theory to Doctrine, supra note 3, at 1483.} Judges granted requested relief in challenges to assault weapons bans 33 percent (2/6) of the time, compared
to a 0-percent success rate after *Heller.*\(^{84}\) Similarly, 25 percent (2/8) of challenges to large-capacity magazine restrictions experienced success after *Bruen.* Restrictions on ghost guns—a category of law that has become more common in response to changes in technology and crime patterns in the post-*Heller* era\(^{85}\)—accounted for two challenges, of which one experienced at least partial success.

“Purchasing restrictions,” which included both seller and buyer requirements like background checks and insurance mandates, comprised 6 percent (27/464) of the database and had a success rate of 7 percent (2/27). The only successes within this category were challenges to insurance mandates, which experienced success in one out of two challenges, and false statements, which experienced success in one out of eight challenges.

The final categories of claims that we coded challenged “when” restrictions, including restrictions on gun possession while committing a crime; “official action,” including sentencing enhancements and police seizures; and “how” restrictions, like safe storage requirements. None of the 14 challenges to “when” restrictions succeeded. “Official action” restrictions had a success rate of just 4 percent (1/23). Our database included no challenges to “how” restrictions—a surprising omission in light of the fact that safe storage laws are passionately opposed by some gun rights organizations.\(^{86}\)

Our data collection primarily focused on characterizing the types of challenges resulting in opinions after *Bruen* and the outcomes of those challenges, not the content of the opinions.\(^{87}\) However, we did code for one content-related variable, whether post-*Bruen* cases cited to *Heller’s* paragraphs on presumptively valid regulations, to assess a major question

---

\(^{84}\) Id. at 1482–83 (observing that no challenges to assault weapons bans had clear success during the study period).


\(^{87}\) In this respect, our focus was more limited than the 2018 study that was our primary comparator. Ruben & Blocher, From Theory to Doctrine, supra note 3, at 1437.
after *Bruen*: whether there will be continuity between pre- and post-*Bruen* case law.

**Figure 5. Post-*Bruen* Litigation, Citation to *Heller*’s Presumptively Lawful Regulation Paragraph**

In the years after *Heller*, *Heller*’s caution that it did not “cast doubt on longstanding prohibitions on the possession of firearms by felons and the mentally ill, or laws forbidding the carrying of firearms in sensitive places such as schools and government buildings, or laws imposing conditions and qualifications on the commercial sale of arms,”[^88] was central to litigation in the lower courts. Indeed, 60 percent of challenges in the 2018 database included explicit reference to that discussion.[^89] The *Bruen* majority did not repeat *Heller*’s reassurance about “longstanding prohibitions,” but concurring opinions signed by three of the Justices in the six-Justice majority did.[^90] Some judges after *Bruen* have continued to

[^88]: District of Columbia v. Heller, 554 U.S. 570, 626–27 (2008). In a footnote, the *Heller* majority cautioned that it “identified these presumptively lawful regulatory measures only as examples; our list does not purport to be exhaustive.” Id. at 627 n.26.

[^89]: Ruben & Blocher, From Theory to Doctrine, supra note 3, at 1488.

[^90]: N.Y. State Rifle & Pistol Ass’n v. Bruen, 142 S. Ct. 2111, 2157 (2022) (Alito, J., concurring); id. at 2162 (Kavanaugh, J., concurring).
One Year Post-Bruen

rely on the *Heller* discussion of “longstanding prohibitions,” and thus we wanted to see how frequently that language was invoked.

Our data suggests that *Heller*’s cautionary language may not be exerting as much influence in the lower courts after *Bruen* as it did after *Heller*. While judges assessing 64 percent (297/464) of the challenges in our database cited *Heller*’s paragraphs on presumptively valid regulations, there was no statistically significant difference in success rates between those and the opinions that did not cite those *Heller* paragraphs.

A major theme after *Bruen* is not just what makes for a successful challenge, but how consistently courts are agreeing on the answer to that question. Our results signal that though success rates have risen, there is broad disagreement about outcomes. If we isolate each of the subcategories of regulations for which there were two or more challenges—44 out of the 81 subcategories—we can then assess whether the challenges within those subcategories are uniform, i.e., whether courts have uniformly either denied relief or granted it. Out of those 44 subcategories, 25, or 57 percent, had divergent results, with at least one opinion granting requested relief and another denying requested relief.

This data invites an obvious question: What is causing such variation in post-*Bruen* case law? One possibility, which highlights a limitation of empirical legal research, is that different fact patterns drive variations. In an as-applied Second Amendment challenge to the federal felon-in-possession law, for example, some litigants are more sympathetic than others because they present less of a danger to society. Our categorization of claims can only drill down so far before it loses its empirical usefulness, and we did not capture nuanced factual differences between cases.

---

91 See, e.g., United States v. Hoover, 635 F. Supp. 3d 1305, 1325 (M.D. Fla. 2022) (“[T]he Supreme Court’s holding in *Bruen* did not overturn *D.C. v. Heller*, in which the Court recognized the importance of ‘the historical tradition of prohibiting the carrying of dangerous and unusual weapons.’”) (quoting *Heller*, 554 U.S. at 627) (internal quotation marks omitted)); United States v. Daniels, No. 03-cr-00083, 2022 WL 5027574, at *4 (W.D.N.C. Oct. 4, 2022) (“Nothing in the *Bruen* decision . . . casts doubt on ‘the longstanding prohibitions on the possession of firearms by felons.’” (quoting *Heller*, 554 U.S. at 626–27)).

92 We excluded the “other” subcategories when counting which subcategories experienced two or more challenges.

93 As far as we are aware, no similar analysis was conducted for pre-*Bruen* challenges.
Another possibility is *Bruen*’s under-specificity, which has granted lower courts broad discretion when trying to implement *Bruen*’s methodology. For example, courts are free to set a higher or lower level of generality for construing history when conducting *Bruen*’s historical-analogical exercise, and the level-of generality choice a judge makes will influence the outcome. Or judges could be disagreeing regarding the continued validity of *Heller*’s presumptively-lawful-regulation paragraphs, which again could lead to discrepancies.

Our data does not permit us to evaluate, or control for, these possibilities. But we did code for a different and potentially related explanation for the incongruous outcomes: judicial ideology. The next Section assesses that possibility.

**D. Variations Based on Judicial Ideology**

Some commentators have opined that an increasingly conservative federal judiciary is to blame or credit (depending on how one views the issue) for Second Amendment successes and the resultant variability of Second Amendment outcomes. This account is often expressly or implicitly about the appointments of Donald Trump, who made frequent ideological promises about his judicial selections. In response to a question shortly after his 2016 election about the judges he would nominate, Trump responded, “[I]n terms of the whole gun
situation . . . they’re going to be very pro-Second Amendment.”97 During a press meeting about the nomination of Neil Gorsuch to the Supreme Court, the National Rifle Association’s CEO, Wayne LaPierre, sat next to Trump.98 Shortly thereafter, during the National Rifle Association convention in April 2019, Trump promised, “You came through for me, and I am going to come through for you.”99

And, according to a recent study, many of Trump’s 54 appointees to the federal courts of appeals and 174 appointees to federal district courts100 had distinctive ideological affiliations.101 With respect to guns, four times as many of Trump’s judicial appointments were members of the National Rifle Association than the general public.102

Before Bruen was decided, Adam Samaha and Roy Germano empirically evaluated the role of ideology in Second Amendment litigation. Their initial studies, which focused on civil decisions in the federal appellate courts between 2008 and early 2016, found no significant ideological divide between judges voting in gun rights cases.103 In their subsequent study of civil gun rights cases in federal appellate courts from 2016 and 2018, however, Samaha and Germano observed an ideological divide. In particular, they “estimate[d] a 21-point gap between Republican and Democratic appointees in the probability of

102 Id. at 11–12.
supporting a claim.” Samaha and Germano queried whether a future Supreme Court opinion “will unsettle or extend these trends.” Post-\textit{Bruen} court outcomes are consistent with an extension of the trend Samaha and Germano observed between 2016 and 2018.

\textbf{1. Federal District Judges}

The dataset includes 392 observations of judge votes in the federal district courts for which we have judge-specific information. Two times as many challenges were decided by Republican-appointed district judges (261) than Democratic-appointed district judges (131). Of the 95 Republican-appointed district judges in our dataset, most were appointed by President George W. Bush (45 judges, associated with 158 challenges), followed by Trump (38 judges, 84 challenges), Ronald Reagan (6 judges, 10 challenges), George H. W. Bush (5 judges, 7 challenges), and Nixon (1 judge, 2 challenges). Most of the 80 Democratic-appointed district judges were appointed by Barack Obama (50 judges, 89 challenges), followed by Bill Clinton (23 judges, 32 challenges), Joe Biden (6 judges, 12 challenges), and Jimmy Carter (1 judge, 1 challenge).

A 31-percentage-point gap separated Republican and Democratic court appointees across combined civil and criminal challenges. Two percent (3/131) of challenges heard by Democratic-appointed judges had success, compared with 33 percent (86/261) of challenges heard by Republican-appointed judges. The spread remains significant if we focus just on civil claims, for which Democratic appointees granted relief in 11 percent (2/18) of challenges, compared to 65 percent (75/116) of challenges before Republican appointees.

Despite the attention paid to Trump appointees, overall, judges appointed by W. Bush granted Second Amendment relief more frequently than judges appointed by Trump in the post-\textit{Bruen} year. In particular, challenges before W. Bush district judge appointees succeeded 42 percent (66/158) of the time, compared to 21 percent (18/84) for Trump appointees.

\footnote{Adam M. Samaha & Roy Germano, Judicial Ideology Emerges, at Last, in Second Amendment Cases, 13 Charleston L. Rev. 315, 315 (2018).}

\footnote{Id. at 320. The authors had \textit{New York State Rifle & Pistol Association v. City of New York} in mind at the time, a case subsequently declared moot. \textit{N.Y. State Rifle & Pistol Ass’n v. City of New York}, 140 S. Ct. 1525, 1526–27 (2020). But their question would equally apply to \textit{Bruen}.}

\footnote{This count excludes magistrate judges who are not appointed by presidents.}
A closer look suggests a more complex picture. Two sets of cases involving challenges to a broad number of sensitive places restrictions in New York and New Jersey account for a disproportionate number of the George W. Bush appointee challenges. In particular, *Antonyuk* in New York involved 49 separate challenges heard by District Judge Glenn T. Suddaby, who granted relief in 34 of them, and the consolidated *Koons/Siegel* litigation in New Jersey involved 31 separate challenges heard by Chief District Judge Renée Marie Bumb, who granted relief in 27 of them. If those cases are removed, the overall ratio of successful challenges for Republican-appointed district judges drops from 33 percent to 14 percent (25/181). Meanwhile, among W. Bush-appointed district judges, the percentage of successful challenges drops from 42 percent to 6 percent (5/78), well below the 21-percent success rate for Trump’s district court appointees, but still more than double the success rate for Democratic-appointed judges.

2. Federal Appellate Judges

We evaluated federal appellate judge ideology by disaggregating panel outcomes into judge votes. Doing so resulted in 54 observations and 48 unique judges, compared with 392 observations for the 175 unique district judges. Like the district judge breakdown, roughly two-thirds (35/54) of appellate judge votes were cast by Republican appointees, compared to one-third (19/54) by Democratic appointees.

Overall, Republican-appointed judges voted for relief 37 percent (13/35) of the time and Democratic-appointed judges voted for relief 21 percent (4/19) of the time. Looking solely at civil cases, Republican-appointed judges voted for relief 83 percent (10/12) of the time. Drilling down suggests that the ideological spread might be even wider but for case selection. All four of the votes for relief by Democratic-appointed judges occurred in *Range v. Attorney General*, a civil case that blended questions of criminal justice reform and gun rights. Range had been convicted of a felony-equivalent crime for making false

---


109 69 F.4th 96 (3d Cir. 2023) (en banc).
statements to obtain food stamps and was permanently barred from possessing a firearm as a result.\textsuperscript{110} Range’s case thus dealt with lifelong collateral consequences of a nonviolent conviction on the one hand, and gun rights on the other, and thus was especially likely to blur ideological lines. As appellate decisions are filed in other Second Amendment cases, it will be interesting to watch whether more of a gap opens up between Democratic-appointed and Republican-appointed judges.

Nine of 17 Trump-appointed appellate judge votes were to grant relief on these challenges, compared with 3 of 11 W. Bush-appointed appellate judge votes. Two out of 4 of Biden-appointee votes were for relief, compared with 1 out of 11 for Obama-appointee votes. For civil claims, all seven Trump-appointee votes and all three W. Bush-appointee votes were to grant relief. Our small sample size for federal appellate votes limits drawing strong inferences from these observations.

III. REGRESSIONS

While the prior descriptive analyses provide some indication about which variables are statistically associated with successful Second Amendment challenges post-\textit{Bruen}, analyzing each variable separately risks misattributing the cause of success. For example, if civil cases are more likely to be successful \textit{ceteris paribus}, but they are also more likely to involve challenges to types of firearm laws that are more likely to be overturned, failing to account for this correlation could lead to overstating the relationship between civil litigation and success.

To address this shortcoming of bivariate analysis, we conducted a series of multivariate regressions. The multivariate regression models provide information on the association of particular claim characteristics with likelihood of litigation success, controlling for other aspects of the claim.\textsuperscript{111}

\begin{footnotesize}
\begin{enumerate}
\item \textsuperscript{110} Id. at 98; see also 18 U.S.C. § 922(g)(1) (setting out the relevant law at issue in \textit{Range}).
\item \textsuperscript{111} The multivariate regressions are estimated as linear probability models. We present results from a parsimonious model specification, determined through a series of iterative exploratory regression analyses to identify the best-fitting model based on Akaike Information Criterion (“AIC”). The AIC is a goodness-of-fit measure that can be used to compare the prediction quality of various models relative to their complexity. See Hirotugo Akaike, Information Theory and an Extension of the Maximum Likelihood Principle, in 2nd International Symposium on Information Theory 267–81 (B.N. Petrov & F. Csáki, eds., 1973). Standard errors are clustered at the opinion level. For more explanation of this method of multivariate regression analysis, see generally Joshua D. Angrist and Jörn-Steffen
\end{enumerate}
\end{footnotesize}
Table 2 shows results from these analyses predicting the probability that a challenge was granted relief at least in part based on the full sample of challenges (n=464). Across columns, we show a subset of the iterative regressions run to determine the model with the best fit, shown in column 4.

Across all analyses, controlling for other claim characteristics, civil cases are significantly more likely than criminal cases to be successfully litigated, with significantly higher probability for civil cases involving an organizational plaintiff. Holding other case characteristics constant at their average values, civil cases involving an organizational plaintiff are 1.6 times more likely to be granted relief compared to civil cases involving an individual plaintiff, and they are nearly five times more likely to be granted relief compared to criminal cases.

There are also consistent, significant differences in how the category of law being challenged relates to probability of relief. Adjusting for other claim characteristics, challenges related to official actions or “when” restrictions are least likely to be successful, with significantly lower probability of being granted relief relative to “who” restrictions, public carry provisions, and sensitive place restrictions. Relative to any other type of law, challenges related to public carry provisions and sensitive place restrictions are significantly more likely to be successful. The difference is particularly marked for sensitive place restrictions. Holding other case characteristics constant at their average values, challenges to sensitive place restrictions are 1.6 times more likely to be granted relief than other public carry restrictions and more than 3.5 times more likely to be granted relief than other types of challenges.

Controlling for other claim characteristics, we detect no statistically significant differences in the probability of being granted relief for claims heard in federal versus state courts, or for challenges that cited versus did not cite Heller’s paragraphs on presumptively lawful regulations.

Table 2. Association of Challenge Characteristics with Probability of Being Granted Relief

<table>
<thead>
<tr>
<th>Case Type</th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Civil, organizational plaintiff</td>
<td>0.429***</td>
<td>0.429***</td>
<td>0.431***</td>
<td>0.431***</td>
</tr>
<tr>
<td></td>
<td>(0.089)</td>
<td>(0.088)</td>
<td>(0.089)</td>
<td>(0.088)</td>
</tr>
<tr>
<td>Civil, non-organizational plaintiff</td>
<td>0.223***</td>
<td>0.226***</td>
<td>0.226**</td>
<td>0.228**</td>
</tr>
<tr>
<td></td>
<td>(0.061)</td>
<td>(0.061)</td>
<td>(0.063)</td>
<td>(0.062)</td>
</tr>
<tr>
<td>Category of Law Challenged</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Public carry</td>
<td>0.180**</td>
<td>0.188***</td>
<td>0.161***</td>
<td>0.171***</td>
</tr>
<tr>
<td></td>
<td>(0.058)</td>
<td>(0.056)</td>
<td>(0.060)</td>
<td>(0.057)</td>
</tr>
<tr>
<td>What restriction</td>
<td>-0.021</td>
<td>-0.011</td>
<td>-0.020</td>
<td>-0.011</td>
</tr>
<tr>
<td></td>
<td>(0.062)</td>
<td>(0.060)</td>
<td>(0.062)</td>
<td>(0.060)</td>
</tr>
<tr>
<td>Where restriction</td>
<td>0.374***</td>
<td>0.374***</td>
<td>0.372***</td>
<td>0.371***</td>
</tr>
<tr>
<td></td>
<td>(0.069)</td>
<td>(0.069)</td>
<td>(0.069)</td>
<td>(0.069)</td>
</tr>
<tr>
<td>Other restrictionsa</td>
<td>-0.081**</td>
<td>-0.077**</td>
<td>-0.085***</td>
<td>-0.081***</td>
</tr>
<tr>
<td></td>
<td>(0.032)</td>
<td>(0.032)</td>
<td>(0.031)</td>
<td>(0.032)</td>
</tr>
<tr>
<td>Jurisdiction</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>State</td>
<td>Ref.</td>
<td>Ref.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Federal</td>
<td>0.057</td>
<td>0.049</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.063)</td>
<td>(0.062)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cite Heller</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>Ref.</td>
<td>Ref.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>-0.029</td>
<td>-0.026</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.046)</td>
<td>(0.046)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>464</td>
<td>464</td>
<td>464</td>
<td>464</td>
</tr>
<tr>
<td>AIC</td>
<td>248.9</td>
<td>247.7</td>
<td>247.7</td>
<td>246.3</td>
</tr>
<tr>
<td>Adjusted R-squared</td>
<td>0.41</td>
<td>0.41</td>
<td>0.41</td>
<td>0.41</td>
</tr>
<tr>
<td>P-value test for organizational plaintiff</td>
<td>0.021</td>
<td>0.020</td>
<td>0.023</td>
<td>0.021</td>
</tr>
</tbody>
</table>

Notes: Results with dummy variables for specific federal circuit courts not shown as these had poorer model fit (AIC=253.3) than specification (1). Standard errors in parentheses clustered at the opinion level. *p<0.10, **p<0.05, ***p<0.01.

a Based on exploratory initial modeling, collapsing when, purchase, and official action restrictions into one category improved model fit; thus, these are collapsed into an “other restriction” category here.
We then restrict our sample to challenges heard by judges in federal district courts for which we obtained information on the president who appointed the judge (n=392). Replicating our prior analysis with the full sample (Table 2, column 4) to this new sample (Table 3, column 1), findings on the relationship between outcomes and claim characteristics are highly similar. Compared with the full sample, results for civil versus criminal claims and organizational versus non-organizational plaintiffs are similar in magnitude and precision. Similar findings also emerge for the category of law challenged, with the exception that the difference in the probability of a successful challenge to public carry provisions and restrictions on who can possess or purchase a firearm are no longer statistically significant.

In columns 2–4, we additionally adjust for measures reflecting the appointing president’s party (column 2), the appointing president (column 3), and the judge’s ABA rating (column 4). Even when accounting for differences in case characteristics, judges appointed by Democratic presidents are significantly less likely than those appointed by Republican presidents to grant relief. Accounting for differences in claim characteristics, on average, judges appointed by Republican presidents are 1.8 times as likely to grant relief as judges appointed by Democratic presidents. With respect to the appointing president (column 3), Trump appointees show the highest probability of deeming a challenge successful, although this difference is only statistically distinguishable from decisions by Democratic-appointed judges. Finally, when examining judge qualifications, ABA rating is not statistically associated with case outcomes.112

---

112 Results are substantively similar when dropping potential outlier cases (Antonyuk or Koons). These results are on file with the authors.
Table 3. Association of Challenge and Judge Characteristics with Probability of Being Granted Relief, Federal Trial Court Cases Only

<table>
<thead>
<tr>
<th>Case Type</th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Civil, organizational plaintiff</td>
<td>0.374***</td>
<td>0.354***</td>
<td>0.349***</td>
<td>0.357***</td>
</tr>
<tr>
<td>Civil, non-organizational plaintiff</td>
<td>0.170**</td>
<td>0.158*</td>
<td>0.160*</td>
<td>0.150*</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Category of Law Challenged</th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public carry provisions</td>
<td>0.154 (0.103)</td>
<td>0.136 (0.095)</td>
<td>0.142 (0.098)</td>
<td>0.134 (0.096)</td>
</tr>
<tr>
<td>What restrictions</td>
<td>0.022 (0.062)</td>
<td>0.006 (0.066)</td>
<td>0.012 (0.067)</td>
<td>0.007 (0.066)</td>
</tr>
<tr>
<td>Where restrictions</td>
<td>0.470*** (0.078)</td>
<td>0.436*** (0.084)</td>
<td>0.444*** (0.090)</td>
<td>0.435*** (0.085)</td>
</tr>
<tr>
<td>Other restrictions*</td>
<td>-0.076** (0.030)</td>
<td>-0.078** (0.032)</td>
<td>-0.077** (0.032)</td>
<td>-0.008** (0.031)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Appointing President Party</th>
<th>(1)</th>
<th>(2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Republican</td>
<td>Ref.</td>
<td>Ref.</td>
</tr>
<tr>
<td>Democrat</td>
<td>-0.121** (0.048)</td>
<td>-0.124** (0.049)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Appointing President</th>
<th>(1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trump</td>
<td>Ref.</td>
</tr>
<tr>
<td>W. Bush</td>
<td>-0.034 (0.070)</td>
</tr>
<tr>
<td>Other Republican</td>
<td>-0.091 (0.100)</td>
</tr>
<tr>
<td>Democrat</td>
<td>-0.146** (0.060)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ABA Rating</th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Qualified or not qualified</td>
<td>-0.019 (0.036)</td>
<td>-0.098 (0.103)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Missing</td>
<td>-0.019 (0.036)</td>
<td>-0.098 (0.103)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| N                              | 392     | 392     | 392     | 392     |
| AIC                            | 188.8   | 189.7   | 192.1   | 192.5   |
| Adjusted R-squared             | 0.46    | 0.47    | 0.47    | 0.47    |
| P-value test for organizational plaintiff | 0.020 | 0.016 | 0.018 | 0.016 |

Notes: In column (3), for the categorical variable of appointing president, we collapse together some presidents associated with a small number of challenges. Standard errors in parentheses clustered at the opinion level. *p<0.10, **p<0.05, ***p<0.01.
Based on exploratory initial modeling, collapsing when, purchase, and official action restrictions into one category improved model fit; thus, these are collapsed into an “other restriction” category here.

For similar reasons, we collapse appointing presidents such that “Other Republican” includes judges appointed by Nixon, Reagan, or H. W. Bush and “Democrat President” includes judges appointed by Obama, Clinton, Carter, or Biden.

CONCLUSION

The Supreme Court’s decision in New York State Rifle & Pistol Association v. Bruen transformed Second Amendment litigation by prescribing a novel doctrinal test. During the following year, courts decided hundreds of challenges across a range of issues that exposed both the remarkable impact of the Supreme Court’s methodological shift and a substantial amount of confusion about how to apply Bruen’s historical-analogical test. This Essay provides an empirical account of Bruen’s impact in the courts. We have charted the remarkable increase in rate of litigation after Bruen compared to after Heller, increased success rates across categories of challenged policies; and widespread discrepancies. We hope our analysis will lead to and facilitate more study, including qualitative analyses, to further supplement our understanding of Bruen’s consequences.