THE GATEKEEPERS OF THE FEDERAL ARBITRATION ACT: AN EMPIRICAL ANALYSIS OF THE FAA IN THE LOWER COURTS

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INTRODUCTION

This article presents the results of the first comprehensive empirical study of contested motions to compel arbitration under the Federal Arbitration Act (FAA), submitted to state and federal courts across the United States over a twelve-month period. The FAA has attracted a remarkable amount of—mostly negative—attention for a century-old statute that is concerned with a seemingly innocuous out-of-court dispute resolution mechanism. The FAA has been depicted as a "monster"[1] statute and is frequently accused of denying individuals their constitutional right to a jury trial without their consent,[2] undermining their access to

[1] David S. Schwartz, *Enforcing Small Print to Protect Big Business: Employee and Consumer Rights Claims in an Age of Compelled Arbitration*, 1997 WIS. L. REV. 33, 36 (1997).

[2] Jean R. Sternlight, *Mandatory Binding Arbitration and the Demise of the Seventh Amendment Right to a Jury Trial*, 16 OHIO ST. J. DISP. RESOL. 669, 676 (2001) (arguing that courts are "upholding many arbitration clauses that would likely be void under the Seventh Amendment test" and that courts should "refuse to enforce those arbitration clauses that are not accepted voluntarily, knowingly, and intelligently"); Jean R.

statutory remedies and insulating big businesses from public and legal accountability. As a result, a strong "anti-arbitration" movement has emerged to advocate for restricting or entirely banning the use of arbitration in certain contexts, such as employment and consumer disputes.[3] This anti-arbitration movement has focused its wrath largely on the Supreme Court as well as the "pro-arbitration" principles that the Court has espoused over the years[4] and scarcely accounts for the FAA's operation beyond the Supreme Court's jurisprudence.

Therefore, little empirical attention has been paid to how thousands of motions to compel arbitration are decided by the lower courts—the gatekeepers of the FAA.[5] However, both the FAA and the Supreme Court reserve considerable discretion to the lower courts to refuse to enforce arbitration agreements.[6] For instance,

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Sternlight, *The Rise and Spread of Mandatory Arbitration as a Substitute for the Jury Trial*, 38 U.S.F. L. REV. 17, 21 (2003) ("the imposition of mandatory arbitration eliminates the civil jury, and often this elimination is not made through a knowing, voluntary, or intelligent waiver."); Margaret L. Moses, *Arbitration Law: Who's in Charge*, 40 SETON HALL L. REV. 147, 175 n.170 (2010) (advocating for arbitration clauses to be "less enforceable than other agreements within an adhesion contract, if actual consent cannot be established, and jury trial rights were not surrendered knowingly and voluntarily").

[3] *See generally* Becky L. Jacobs, *Often Wrong, Never in Doubt: How Anti-Arbitration Expectancy Bias May Limit Access to Justice*, 62 ME. L. REV. 531 (2010).

[4] These principles include, for instance, that statutory claims are arbitrable (Scherk v. Alberto-Culver Co., 417 U.S. 506, 508 (1974)); that most employment claims are arbitrable (*see generally* Circuit City Stores, Inc. v. Adams, 532 U.S. 105 (2001)); that consumer claims are arbitrable (*see generally* Allied–Bruce Terminix Cos. v. Dobson, 513 U.S. 265 (1995)); that class action waivers in arbitration agreements are enforceable (*see generally* AT&T Mobility LLC v. Concepcion, 563 U.S. 333 (2011)); that arbitrators may decide "arbitrability" questions where there is "clear and unmistakable" evidence that the parties have so agreed (Rent-A-Center, West, Inc. v. Jackson, 561 U.S. 63, 71-72 (2010)); and that the validity of an arbitration clause is separate from the validity of the contract in which it is contained (Buckeye Check Cashing, Inc. v. Cardegna, 546 U.S. 440, 449 (2006)).

[5] FRANK B. CROSS, DECISION MAKING IN THE U.S. COURTS OF APPEALS 1-2 (2007) (noting generally that while most "scholarly research deals with the U.S. Supreme Court, the circuit courts are much more important in setting and enforcing the law of the United States."). Some lower courts have recognized their role as gatekeepers of FAA arbitration. *See, e.g.*, Robbins v. Playhouse Lounge, No. 1:19-cv-08387-NLH-KMW, 2021 WL 2525709, at *7 (D.N.J. June 21, 2021) ("the Court must engage in its gatekeeping duty and assess [the plaintiff's] arguments" in opposition to a motion to compel arbitration.).

[6] Section 2 of the FAA permits courts to refuse to enforce arbitration agreements on "such grounds as exist at law or in equity for the revocation of any contract." 9 U.S.C. §

courts can refuse to enforce an arbitration agreement on any contract law ground pertaining to the existence, formation, or validity of the agreement and can determine that a claim falls outside the scope of an arbitration agreement. Yet few studies have examined how parties attempt to convince courts to exercise this discretion and what might prompt a court to do so.

Our study uses content analysis as well as statistical methods to analyze an original dataset of 1,450 decisions in contested motions to compel arbitration under the FAA,[7] rendered by state and federal courts (excluding the Supreme Court) across the United States between June 1, 2021, and May 31, 2022. Motions to compel arbitration are filed pursuant to Section 4 of the FAA,[8] typically, by a defendant who seeks to enforce an arbitration agreement in response to an action commenced in court by a plaintiff.[9] The

2. The Supreme Court has repeatedly confirmed that courts may refuse to enforce arbitration agreements on the basis of "generally applicable contract defenses, such as fraud, duress, or unconscionability, may be applied to invalidate arbitration agreements without contravening § 2." Doctor's Assocs., Inc. v. Casarotto, 517 U.S. 681, 687 (1996).

[7] The defendant may seek to compel arbitration by way of a summary judgment or a motion to dismiss under the Federal Rules of Civil Procedure, namely Rule 56 for summary judgments, Rule 12(b)(3) for dismissal for improper venue, and Rule 12(b)(6) for dismissal for failure to state a claim. The courts have been inconsistent as to the procedure that should be followed in motions to compel arbitration under the FAA. *See* Boykin v. Fam. Dollar Stores of Michigan, LLC, 3 F.4th 832, 837-38 (6th Cir. 2021) (discussing the circuit split in this regard).

[8] Section 4 provides that "upon being satisfied that the making of the agreement for arbitration or the failure to comply therewith is not in issue, the court shall make an order directing the parties to proceed to arbitration in accordance with the terms of the agreement."

[9] It is possible, although far less common, for a plaintiff to file a motion to compel arbitration in court in the event that a defendant is not responsive to a notice of arbitration filed by the plaintiff. We had six such cases in our dataset. *See,* Aguilar v. Enersys Energy Prods., Inc., No. 2:21-cv-8669-SVW (MARx), 2022 WL 2285657 (C.D. Cal. Jan. 18, 2022); Paramount Bank v. Hominsky, No. 4:21-cv-01284-SRC, 2021 WL 6072494 (E.D. Mo. Dec. 23, 2021); Holifield v. Barclay Props., No. 05-21-00239-CV, 2021 WL 4549498 (Tex. App. Oct. 5, 2021); State Farm Mut. Auto. Ins. Co. v. Ozobu, 19STCV36723, 2022 Cal. Super. LEXIS 21475 (Super. Ct. Cal. Apr. 27, 2022); Baxter v. Pub. Storage Pickup & Delivery, 20STCV10937, 2021 Cal. Super. LEXIS 134168 (Super. Ct. Cal. Dec. 14, 2021); Quinonez-Castro v. Sherzai Motors, 37-2021-00024739-CL-CO-NC, 2021 Cal. Super. LEXIS 47403 (Super. Ct. Cal. Aug. 13, 2021). A motion to compel arbitration filed by a plaintiff may also occur in the context of a "mass arbitration," where multiple employee or consumer plaintiffs simultaneously file hundreds or thousands of arbitrations against a single defendant employer or business for the same alleged unlawful conduct. The arbitration fees the defendant is required to pay in each arbitration can accumulate to millions of dollars. In these cases, some defendants have

plaintiff then typically opposes the motion by challenging the arbitration agreement on various grounds. We examine the effect of different variables relating to the court, the judge(s), and the dispute on the outcome of these contested motions to compel arbitration. While there are likely many arbitrations occurring every day without passing through the courts, our study focuses on those arbitration agreements not voluntarily complied with by parties. These contested arbitrations demonstrate the crucial role of the courts as gatekeepers to the enforcement of the FAA.

We do not set out to prove or disprove any particular view of arbitration or of the FAA, nor to pass judgment on parties' or the courts' treatment of arbitration. Our goal is primarily explanatory—to provide a detailed and objective account of the FAA's operation in both state and lower federal courts.[10] Yet our study is not merely of academic interest to those studying arbitration or judicial decision-making. Our study will also provide parties to arbitration agreements with valuable insights for their litigation strategy in motions to compel arbitration. For instance, our study shows that in most cases, defendants should not dedicate resources to removing such a motion from state to federal court because state courts are generally as likely to grant a motion to compel arbitration as federal courts.[11] Similarly, plaintiffs need not worry about trying to defeat diversity to remand a motion to compel arbitration back to state court. Our study also shows that most

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applied to the courts in an attempt to avoid, rather than compel, the arbitrations. These attempts have thus far been unsuccessful. *See generally, e.g.,* J. Maria Glover, *Recent Developments in Mandatory Arbitration Warfare: Winners and Losers (So Far) in Mass Arbitration*, 100 WASH. U. L. REV. 1617 (2023). However, we note that we did not have such a case in our dataset.

[10] Elsewhere, one of the authors examines the historical evolution of the FAA in the lower courts, which has led to some of the Supreme Court's most seminal arbitration decisions. *See generally* Tamar Meshel, *The Judicial Grassroots of the "Arbitration Revolution"*, 15 WM. & MARY BUS. L. REV. 245 (2024).

[11] Many of the motions to compel arbitration in federal courts are removed from state courts by the defendant. Frequently, plaintiffs attempt to remand the action to state courts and defendants resist such attempts. *See generally, e.g.*, Tantaros v. Fox News Network, LLC, 12 F.4th 135 (2nd Cir. 2021) (denying plaintiff's motion to remand); *see also* Messih v. Mercedes-Benz USA, LLC, No. 21-cv-03032-WHO, 2021 WL 2588977 (N.D. Cal. June 24, 2021) (denying defendant's motion to compel arbitration and denying plaintiff's motion to remand); Carson Concrete Corp. v. Int'l Ass'n of Bridge, Structural, Ornamental & Reinforced Iron Workers, AFL-CIO, Loc. Union 405, No. 2:21-cv-02789, 2021 WL 5507711 (E.D. Pa. Nov. 24, 2021) (granting plaintiff's motion to remand).

plaintiffs should not waste time and resources contesting motions to compel arbitration on unconscionability grounds (unless the arbitration agreement is truly unconscionable under the applicable state law) because these arguments rarely succeed.

Policymakers could also draw important insights from the study when evaluating the efficacy of the FAA. Notwithstanding the push for legislative action to prohibit the enforcement of "unfair" arbitration agreements, such as those contained in consumer and employment adhesion contracts, our study shows that the vast majority of these agreements are not generally accepted by the court as being truly "unfair" in the legal sense of being unconscionable.[12] From a legal standpoint, the more problematic aspects of these agreements appear to be related to their formation. Therefore, policymakers should focus legislative efforts on regulating web-based and mobile-based contracts and how consumers and employees assent to them rather than restricting the enforcement of arbitration agreements generally.

The Article proceeds as follows: Part I introduces the FAA, its main critiques, and the existing empirical literature on arbitration and explains how our study contributes to this literature. Part II sets out the methodology used in the study, and Part III presents and analyzes its findings. In Part IV, we discuss the implications of the study's results for the debate surrounding FAA arbitration. Part V concludes.

I. THE FEDERAL ARBITRATION ACT

Congress enacted the FAA in 1925 to make arbitration agreements "valid, irrevocable, and enforceable, save upon such grounds as exist at law or in equity for the revocation of any contract."[13] The Act was in large part a response to judicial hostility to arbitration in the 18th and early 19th centuries, which was viewed as "ousting" the courts of their jurisdiction.[14] Nowadays, the focus

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[12] Christopher R. Drahozal, "*Unfair" Arbitration Clauses*, 2001 U. ILL. L. REV. 695 (2001) (showing empirically that "unfair" arbitration agreements are less prevalent than the literature suggests and that not all arbitration clauses can be labeled "unfair").

[13] 9 U.S.C. § 2.

[14] Badgerow v. Walters, 142 S. Ct. 1310, 1322 (2022) ("the 'preeminent' purpose of the FAA was to overcome some judges' reluctance to enforce arbitration agreements when a party tried to sue in court instead.") (citing Dean Witter Reynolds Inc. v. Byrd,

remains on the judiciary's attitude toward arbitration, but the tables have turned. In contrast to pre-1925 arbitration jurisprudence, the FAA is now perceived as the darling of the judiciary and especially of the Supreme Court.[15]

The result of the Supreme Court's affinity toward arbitration, the argument goes, has been an exponential increase in its use—a so-called "arbitration revolution."[16] This revolution is said to be

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470 U.S. 213, 221 (1985)*; see also*, IAN R. MACNEIL, AMERICAN ARBITRATION LAW: REFORMATION—NATIONALIZATION—INTERNATIONALIZATION 19 (1992) (referring to the "arbitration reform movement" that has promoted the idea of judicial hostility to arbitration); Sabra A. Jones, *Historical Development of Commercial Arbitration in the United States*, 12 MINN. L. REV. 240, 256 (1928) ("In the early history of the United States there was considerable objection to arbitration. This primarily was due to the fact that in England there was a deep rooted rule that parties might not, by their agreement, oust the jurisdiction of the courts."); Allied-Bruce Terminix Cos. v. Dobson, 513 U.S. 265, 270 (1995) ("[T]he basic purpose of the [FAA] is to overcome courts' refusals to enforce agreements to arbitrate."); Epic Sys. Corp. v. Lewis, 138 S. Ct. 1612, 1621 (2018) ("Congress adopted the Arbitration Act in 1925 in response to a perception that courts were unduly hostile to arbitration. No doubt there was must to that perception. Before 1925, English and American common law courts routinely refused to enforce agreements to arbitrate disputes.").

[15] *See, e.g.,* Preston Douglas Wigner, *The United States Supreme Court's Expansive Approach to the Federal Arbitration Act: A Look at the Past, Present, and Future of Section 2*, 29 U. RICH. L. REV. 1499, 1500 (1995) ("[T]he Court greatly expanded the application of the FAA to contracts containing arbitration agreements."); *see also* Margaret L. Moses, *Arbitration of Worker Contracts: New Prime's Proper Statutory Interpretation of the 1925 Federal Arbitration Act*, 21 CARDOZO J. CONFLICT RESOL. 415, 415 (2020) ("The U.S. Supreme Court has been expanding the scope of arbitration under the [FAA]."); David L. Noll & Zachary D. Clopton, *An Arbitration Agenda for the Biden Administration*, 2021 U. ILL. L. REV. ONLINE 104, 104 (2021) ("a series of Supreme Court rulings at the behest of big business have blunted private enforcement's power by expanding the scope of arbitration under the [FAA]."); Hila Keren, *Divided and Conquered: The Neoliberal and Emotional Consequences of the Arbitration Revolution*, 72 FLA. L. REV. 575, 578 (2020); Cir. City Stores, Inc. v. Adams, 532 U.S. 105, 132 (2001) (Stevens, J., dissenting) ("There is little doubt that the Court's interpretation of the [FAA] has given it a scope far beyond the expectations of the Congress that enacted it."); Jeffrey W. Stempel, *Tainted Love: An Increasingly Odd Arbitral Infatuation in Derogation of Sound and Consistent Jurisprudence*, 60 U. KAN. L. REV. 795, 878 (2012) ("The Court's modern arbitration jurisprudence imposed a judicial evolution of the [FAA] in which the statute morphed from one shielding the commercial contracts of merchants from overt judicial hostility into a statute allegedly enshrining a 'liberal' and 'national policy' in favor of arbitration . . . .").

[16] *See, e.g.*, David Horton, *Pirate Arbitration*, 106 MINN. L. REV. 2111, 2117 (2022) (noting that "[t]he Court's 'arbitration revolution' has sparked decades of heated debate."); *see also* J. Maria Glover, *Mass Arbitration*, 74 STAN. L. REV. 1283, 1292 (2022) (arguing that the Supreme Court's arbitration jurisprudence has resulted in "nothing short of a revolution: an *arbitration revolution*."); Andrew B. Nissensohn, *Mass*

reflected, for instance, in the increased inclusion of arbitration clauses in employment and consumer adhesion contracts that then tend to be enforced by the courts in disputes involving statutory claims, civil rights claims, and class claims.[17] In addition, arbitrators are permitted to decide challenges to the validity and scope of an arbitration clause rather than merely the merits of the underlying dispute, and arbitration clauses are allowed to survive the invalidation of the contracts in which they are contained.[18] Finally, the FAA pervades all levels of the judiciary as the FAA applies in both federal and state courts and preempts any state law that "stands as an obstacle to the accomplishment and execution of the full purposes and objectives of Congress" in enacting the FAA.[19]

These impacts of the FAA, according to the conventional wisdom, have resulted from its judicial interpretation by the Supreme Court rather than from the act itself.[20] Accordingly, the

Arbitration 2.0, 79 WASH. & LEE L. REV. 1225, 1231 (2022) (referring to "the Arbitration Revolution, whereby the Supreme Court interpreted the [FAA] to prohibit class waivers in mandatory arbitration agreements."); David Horton & Andrea Cann Chandrasekher, *After the Revolution: An Empirical Study of Consumer Arbitration*, 104 GEO. L.J. 57, 70 (2015) [hereinafter *After the Revolution: An Empirical Study of Consumer Arbitration*] (discussing the Supreme Court's "consumer arbitration revolution"); Keren, *supra* note 15, at 579 (noting that the Supreme Court's "arbitration revolution" has been "far-reaching"); David Sherwyn et al., *Assessing the Case for Employment Arbitration: A New Path for Empirical Research*, 57 STAN. L. REV. 1557, 1561 (2005) (arguing that the Supreme Court's decision in Gilmer v. Interstate/Johnson Lane Corp., 500 U.S. 20 (1991) "launched the modern arbitration revolution."); David L. Noll, *Arbitration Conflicts*, 103 MINN. L. REV. 665, 679-680 (2018) (referring to "Supreme Court decisions interpreting the FAA" as an "arbitration revolution."). *But cf.*, Tamar Meshel, *supra* note 10, at 245 (arguing that some of the most criticized arbitration principles set out in the Supreme Court's opinions were in fact derived from the lower courts).

[17] *See* Scherk v. Alberto-Culver Co., 417 U.S. 506, 508 (1974) (concerning statutory claims); *see also* Cir. City Stores, Inc. v. Adams, 532 U.S. 105 (concerning employment claims); Allied–Bruce Termininx Cos. v. Dobson, 513 U.S. 265 (1995) (concerning consumer claims); AT&T Mobility, LLC v. Concepcion, 563 U.S. 333 (2011) (concerning class claims).

[18] This is known as the "severability principle," according to which the validity of an arbitration clause is separate from the validity of the contract in which it is contained. Buckeye Check Cashing, Inc. v. Cardegna, 546 U.S. 440, 446-7 (2006).

[19] AT&T Mobility LLC v. Concepcion, 563 U.S. 333, 352 (2011).

[20] Scores of articles have been written on the Supreme Court's FAA jurisprudence. *See, e.g.*, Kenneth F. Dunham, *Great Gilmer's Ghost: The Haunting Tale of the Role of Employment Arbitration in the Disappearance of Statutory Rights in Discrimination Cases*, 29 AM. J. TRIAL ADVOC. 303 (2005) (discussing the negative effect of the Supreme Court's FAA jurisprudence on labor and employment claims); Janna Giesbrecht-Mckee, *The Fairness Problem: Mandatory Arbitration in Employment Contracts*, 50

focal point of scholarly attention has been the Supreme Court instead of Congress. However, it is Congress that has largely refused to amend the FAA in response to critiques.[21] Indeed, "critical arbitration theory"[22] posits that . . . the Supreme Court's "improper preference"[23] for arbitration has single handedly transformed the FAA from a "toothless"[24] act to a "super-statute."[25]

WILLAMETTE L. REV. 259, 261 (2014) (criticizing "the U.S. Supreme Court . . . cases that led to employment arbitration's current hallowed status."); Cornelis J. W. Baaij, *A Case of Mistaken Identity: Questioning the U.S. Supreme Court's Contract Theory of Arbitration*, 14 VA. L. & BUS. REV. 121, 124 (2020) (". . . reassessing the legitimacy of an expansive application of the FAA by the Supreme Court."); Myriam Gilles, *The Day Doctrine Died: Private Arbitration and the End of Law*, 2016 U. ILL. L. REV. 371, 377 (2016) (describing "important transformations in the Supreme Court's arbitration jurisprudence beginning in the mid-1980s, culminating in the enforceability of arbitration clauses with embedded class bans in standard form agreements."); Paul L. Edenfield, *No More the Independent and Virtuous Judiciary: Triaging Antidiscrimination Policy in a Post-*Gilmer *World*, 54 STAN. L. REV. 1321, 1327 (2002) ("lament[ing] the Supreme Court's failure in *Gilmer* to balance conflicting statutory purposes, justified by a wishful presumption that arbitrators are the matches of judges."); Jodi Wilson, *How the Supreme Court Thwarted the Purpose of the Federal Arbitration Act*, 63 CASE W. RSRV. L. REV. 91 (2012) (critiquing the Court's decision in *AT&T Mobility LLC v. Concepcion*); Kathryn A. Sabbeth & David C. Vladeck, *Contracting (Out) Rights*, 36 FORDHAM URB. L.J. 803, 807 (2009) (arguing that "the Supreme Court's embrace of mandatory arbitration reflects a return to a *Lochner*-like veneration for the freedom to contract unrestrained by public laws."); Maureen A. Weston, *Preserving the Federal Arbitration Act by Reining in Judicial Expansion and Mandatory Use*, 8 NEV. L.J. 385, 386 (2007) (arguing that "one problem with the FAA has resulted largely from the common law; that is, how courts, led by the Supreme Court since the early 1980's, have broadly interpreted, and, arguably, *misinterpreted* the FAA.").

[21] The FAA was recently amended to exclude from its scope sexual harassment and assault claims. The Ending Forced Arbitration of Sexual Assault and Sexual Harassment Act of 2021 came into effect on March 3, 2022. 9 U.S.C. §§ 401–402. This was the first substantive amendment intended to restrict the scope of the Act. Prior amendments included § 7 (in 1951); § 4 (in 1954); Ch. 2 (in 1970); §§ 15-16 (in 1988); Ch. 3, § 10 and § 15 (in 1990); § 10(b) (in 1992); and § 10 (in 2002).

[22] Jill I. Gross, *Arbitration Archetypes for Enhancing Access to Justice*, 88 FORDHAM L. REV. 2319, 2321 (2020).

[23] *Id*.

[24] Ryan Miller, *Next-Gen Arbitration: An Empirical Study of How Arbitration Agreements in Consumer Form Contracts Have Changed after* Concepcion *and* American Express, 32 GEO. J. LEGAL ETHICS 793, 798 (2019).

[25] Kristen M. Blankley, *The Future of Arbitration Law?*, 2022 J. DISP. RESOL. 51, 86 (2022) (defining a "super-statute" as a statute that "carries extra weight, particularly when [it] appears to conflict with another federal statute" and concluding that "the FAA today meets the definition of a super-statute, even though Congress likely did not consider it to be one when passed in 1925."). The concept of a super-statute was coined

Surprisingly few scholars, however, have investigated the operation of the Act in the lower courts—the gatekeepers of the FAA—who decide thousands of arbitration cases.[26]

Instead, empirical investigations over the past two decades have been largely concerned with the arbitration process itself. For instance, in a series of articles, Horton and Chandrasekher have

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and developed by William Eskridge. William N. Eskridge, Jr. & John Ferejohn, *Super-Statutes*, 50 DUKE L.J. 1215 (2001). For a contrary view of the FAA, *see* Noll, *supra* note 16, at 671-72 (arguing "[t]he FAA is not, on any accepted theory of statutory interpretation, a 'super-statute' that occupies a special position in federal law").

[26] While our study does not focus on the impact of ideology on judicial decision-making (beyond testing judges' political association), the vast body of literature on the "attitudinal model" of judicial behavior is worth noting. In essence, this model perceives judicial decision-making as influenced by "the facts of the case vis-à-vis the ideological attitudes and values of the justices." JEFFREY A. SEGAL & HAROLD J. SPAETH, THE SUPREME COURT AND THE ATTITUDINAL MODEL REVISITED 86 (2002). *See also*, *e.g.,* Cass R. Sunstein et al., *Ideological Voting on Federal Courts of Appeals: A Preliminary Investigation*, 90 VA. L. REV. 301 (2004) (examining the impact of ideology, represented by the political association of the appointing president, on individual and panel voting in various policy areas); CASS R SUNSTEIN ET AL., ARE JUDGES POLITICAL? AN EMPIRICAL ANALYSIS OF THE FEDERAL JUDICIARY 15-16 (2006) (empirically testing party effects and panel effects in federal courts on the "attitudinal model"); LEE EPSTEIN ET AL., THE BEHAVIOR OF FEDERAL JUDGES: A THEORETICAL AND EMPIRICAL STUDY OF RATIONAL CHOICE 175-188, 216-253 (2013) (testing, *inter alia*, the impact of judicial ideology and group influence on judges' votes in federal district and circuit courts); CROSS, *supra* note 5, at 11-38 (examining, *inter alia*, "the role of judicial politics in decision making in the circuit courts"); Erwin Chemerinsky, *Ideology and the Selection of Federal Judges*, 36 U.C. DAVIS L. REV. 619 (2003) (examining the relationship between the selection of federal judges and their ideology); Joanna M. Shepherd, *Are Appointed Judges Strategic Too?*, 58 DUKE L.J. 1589 (2009) (arguing that both the election and the appointment of judges have aspects that threaten judicial independence); Stephen J. Ware, *Money, Politics and Judicial Decisions: A Case Study of Arbitration Law in Alabama*, 15 J.L. & POL. 645 (1999) (reviewing arbitration decisions of the Alabama Supreme Court and finding a "remarkably close correlation between a justice's votes on arbitration cases and his or her source of campaign funding."). More recent studies examining the attitudinal model in different contexts include *e.g.*, Johannes W. Fedderke & Marco Ventoruzzo, *Do Conservative Justices Favor Wall Street: Ideology and the Supreme Court's Securities Regulation Decisions*, 67 FLA. L. REV. 1211 (2015) (identifying a relationship between ideology and securities regulation decisions of Supreme Court Justices); Stephen B. Burbank & Sean Farhang, *Politics, Identity, and Pleading Decisions on the U.S. Courts of Appeals*, 169 U. PA. J. CONST. L. 2127 (2021) (examining the relationship between party association, gender, and racial composition of appeal panels and their disposition of Federal Rule of Civil Procedure 12(b)(6) appeals across policy areas); Alexander A. Reinert, *Asymmetric Review of Qualified Immunity Appeals*, 20 J. EMPIRICAL LEGAL STUD. 4 (2023) (finding that circuit court identity and the political party of the president who appointed the appellate judges were significantly correlated with the judicial treatment of the qualified immunity defense).

examined arbitration filings and awards in employment disputes,[27] consumer disputes,[28] and medical malpractice disputes.[29] Colvin and Gough have also examined outcomes of employment arbitrations.[30] There have been similar empirical studies of consumer arbitrations[31] and securities arbitrations.[32] Moreover, Drahozal has examined the costs and accessibility of arbitration in various other contexts.[33] Even those studies that have addressed litigation in the courts have been limited to a comparison of litigation and arbitration. For example, Chew has compared litigation and arbitration outcomes in sex discrimination cases as a function of the judge's or arbitrator's gender.[34] Sherwyn, Estreicher, and Heise have compared the outcomes of employment disputes submitted to company-level dispute resolution mechanisms, the Equal Employment Opportunity Commission, and federal courts.[35] Gough has compared the costs of litigating and

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[27] *See generally* David Horton & Andrea Cann Chandrasekher, *Employment Arbitration after the Revolution*, 65 DEPAUL L. REV. 457 (2016) [hereinafter *Employment Arbitration after the Revolution*].

[28] *See generally After the Revolution: An Empirical Study of Consumer Arbitration*, *supra* note 16.

[29] *See generally* Andrea Cann Chandrasekher & David Horton, *Arbitration Nation: Data from Four Providers*, 107 CAL. L. REV. 1 (2019) [hereinafter *Arbitration Nation*] (this article also examines employment and consumer arbitrations).

[30] *See generally* Alexander J. S. Colvin & Mark D. Gough, *Individual Employment Rights Arbitration in the United States: Actors and Outcomes*, 68 ILR REV. 1019 (2015). Older empirical studies of employment arbitration conducted by Colvin include, *e.g.*, Alexander J. S. Colvin, *An Empirical Study of Employment Arbitration: Case Outcomes and Processes*, 8 J. EMPIRICAL LEGAL STUD. 1 (2011); Alexander J.S. Colvin, *Empirical Research on Employment Arbitration: Clarity Amidst the Sound and Fury*, 11 EMP. RTS. & EPM. POL'Y J. 405 (2007).

[31] *See generally, e.g.,* Sarah R. Cole & Kristen M. Blankley, *Empirical Research on Consumer Arbitration: What the Data Reveals*, 113 PENN STATE L. REV. 1051 (2009); Christopher R. Drahozal & Samantha Zyontz, *An Empirical Study of AAA Consumer Arbitrations*, 25 OHIO ST. J. ON DISP. RESOL. 843 (2010).

[32] *See generally, e.g.*, Stephen J. Choi & Theodore Eisenberg, *Punitive Damages in Securities Arbitration: An Empirical Study*, 39 J. LEGAL STUD. 497 (2010).

[33] *See generally* Christopher R. Drahozal, *Arbitration Costs and Forum Accessibility: Empirical Evidence*, 41 U. MICH. J. L. REFORM 813 (2008).

[34] *See generally, e.g.*, Pat K. Chew, *Comparing the Effects of Judges' Gender and Arbitrators' Gender in Sex Discrimination Cases and Why It Matters*, 32 OHIO STATE J. ON DISP. RES. 195 (2017).

[35] *See generally* David Sherwyn et al., *supra* note 16, at 1557.

arbitrating employment discrimination claims[36] while Yoon has compared arbitration and litigation of medical malpractice claims.[37]

Another aspect of arbitration that scholars have studied empirically in recent years is arbitration's use in various types of contracts. For instance, Eisenberg, Miller, and Sherwin have examined the use of arbitration clauses in consumer and non-consumer contracts of large public companies.[38] Bucilla[39] as well as Koenigf and Rustadt[40] have examined the use of arbitration clauses in websites; Drahozal and Rutledge have looked at arbitration clauses in credit card agreements;[41] Tripp has studied arbitration clauses in nursing home admission contracts;[42] and Thomas, O'Hara, and Martin have examined the use of arbitration clauses in CEO employment contracts.[43] Scholars have also studied users' attitudes toward arbitration in various contexts. For instance, Sovern, Greenberg, Kirgis, and Liu have examined consumers'

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[36] *See generally* Mark D. Gough, *The High Costs of an Inexpensive Forum: An Empirical Analysis of Employment Discrimination Claims Heard in Arbitration and Civil Litigation*, 35 BERKELEY J. EMP. & LAB. L. 91 (2014).

[37] *See generally* Albert Yoon, *Mandatory Arbitration and Civil Litigation: An Empirical Study of Medical Malpractice Litigation in the West*, 6 AM. L. & ECON. REV. 95 (2004).

[38] *See generally* Theodore Eisenberg et al., *Arbitration's Summer Soldiers: An Empirical Study of Arbitration Clauses in Consumer and Nonconsumer Contracts*, 41 U. MICH. J.L. REFORM 871 (2008)*; see also* Theodore Eisenberg & Geoffrey P. Miller, *The Flight from Arbitration: An Empirical Study of Ex Ante Arbitration Clauses in the Contracts of Publicly Held Companies*, 56 DEPAUL L. REV. 335 (2007); Nancy S. Kim & Chii-Dean Lin, *Arbitration's Summer Soldiers Marching Into Fall: Another Look At Eisenberg, Miller, And Sherwin's Empirical Study Of Arbitration Clauses In Consumer And Nonconsumer Contracts*, 34 VT. L. REV. 597 (2010); Miller, *supra* note 24, at 793.

[39] *See generally* James R. Bucilla II, *The Online Crossroads of Website Terms of Service Agreements and Consumer Protection: An Empirical Study of Arbitration Clauses in the Terms of Service Agreements for the Top 100 Websites Viewed in the United States*, 15 WAKE FOREST J. BUS. & INTELL. PROP. L. 102 (2014).

[40] *See generally* Thomas H. Koenig & Michael L. Rustad, *Fundamentally Unfair: An Empirical Analysis of Social Media Arbitration Clauses*, 65 CASE W. RSRV. L. REV. 341 (2014) (examining terms of use of social media providers).

[41] *See generally* Christopher R. Drahozal & Peter B. Rutledge, *Arbitration Clauses in Credit Card Agreements: An Empirical Study*, 9 J. EMPIRICAL LEGAL STUD. 536 (2012). Drahozal has also examined arbitration clauses in franchise agreements. *See generally* Drahozal, *supra* note 12.

[42] Lisa Tripp, *Arbitration Agreements Used by Nursing Homes: An Empirical Study and Critique of* AT&T Mobility v. Concepcion, 35 AM. J. TRIAL ADVOC. 87 (2011).

[43] *See generally* Randall Thomas et al., *Arbitration Clauses in CEO Employment Contracts: An Empirical and Theoretical Analysis*, 63 VAND. L. REV. 959 (2010).

understanding of arbitration agreements[44] while Gross and Black have looked at investors' views of securities arbitration.[45]

We have identified only three studies ever conducted on lower courts' interpretation and application of the FAA. The first study, conducted by Rice, tested a proportional stratified random sample of 563 motions to compel arbitration clauses in written contracts and 115 motions to compel arbitration in clauses in standardized application forms rendered between 1925 and 2014.[46] The question posed was whether "irrelevant or prejudicial factors are systematically affecting—consciously or unconsciously—federal and state court judges' dispositions of motion to compel arbitration disputes?"[47] The study concluded that federal courts tend to enforce arbitration agreements more frequently than state courts and that both state and federal courts "routinely ignore or refuse to weigh carefully and intelligently states' settled principles of contract law when deciding whether to coerce applicants into binding arbitration."[48]

The second study, also conducted by Rice, tested a proportional stratified random sample of 285 motions to compel arbitration clauses in state court and 299 motions to compel arbitration in federal courts rendered between 1800 and 2015.[49] The study focused on state and federal courts' comparative treatment of the procedural and substantive unconscionability defense as well as the

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[44] *See generally* Jeff Sovern et al., *"Whimsy Little Contracts" with Unexpected Consequences: An Empirical Analysis of Consumer Understanding of Arbitration Agreements*, 75 MD. L. REV. 1 (2015).

[45] *See generally* Jill I. Gross & Barbara Black, *When Perception Changes Reality: An Empirical Study of Investors' Views of the Fairness of Securities Arbitration*, 2008 J. DISP. RESOL. 349 (2008).

[46] Willy E. Rice, *Courts Gone "Irrationally Biased" In Favor of the Federal Arbitration Act?—Enforcing Arbitration Provisions in Standardized Applications and Marginalizing Consumer Protection, Antidiscrimination, and States' Contract Laws: A 1925–2014 Legal And Empirical Analysis*, 6 WILLIAM & MARY BUS. L. REV. 405, 485-86 (2015).

[47] *Id.* at 484.

[48] *Id.* at 416.

[49] Willy E. Rice, *Unconscionable Judicial Disdain for Unsophisticated Consumers and Employees' Contractual Rights? - Legal and Empirical Analyses of Courts' Mandatory Arbitration Rulings and the Systematic Erosion of Procedural and Substantive Unconscionability Defenses under the Federal Arbitration Act, 1800-2015*, 25 B.U. PUB. INT. L.J. 143 (2016).

impact of extralegal factors on this treatment.[50] The study concluded that "a host of extralegal and legal factors influence the dispositions of motions to compel arbitration in state and federal courts" and that "both federal and state courts are significantly more likely to grant motions to compel arbitration when 'legally unsophisticated' consumers and employees raise an unconscionability defense."[51]

The third study, conducted by LeRoy, tested 483 federal and state lower and appellate court rulings between 1975 and 2008 reviewing employment arbitration awards under both the FAA and state arbitration laws.[52] The study concluded that "lower courts very rarely vacated arbitration awards, for both general employment-related claims and Title VII claims. Appellate courts were less deferential to arbitrators than the lower courts, except in Title VII cases, where the appellate courts were still very deferential."[53] In addition, "[a]rbitrator rulings on Title VII statutory discrimination claims are more insulated from court review than comparable rulings by federal judges" even though courts vacate "too many" arbitrator rulings "on common law claims involving contract principles."[54]

Our study differs from these previous studies in at least two important ways. First, it tests different variables than those tested in the previous studies, including the political association of the judge(s) and the type of arguments that parties raised in motions to compel arbitration. Second, our study uses a different sampling frame than previous studies. It focuses only on the FAA and

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[50] *See id.* at 211-12.

[51] *Id.* at 153.

[52] *See generally* Michael H. LeRoy, *Crowning the New King: The Statutory Arbitrator and the Demise of Judicial Review*, 2009 J. DISP. RESOL. 1 (2009) [hereinafter *Crowning the New King*]. LeRoy also published two other studies based on this data. *See*, Michael H. LeRoy, *Misguided Fairness - Regulating Arbitration by Statute: Empirical Evidence of Declining Award Finality*, 83 NOTRE DAME L. REV. 551 (2008) (testing 426 federal and state lower and appellate court rulings between 1975 and 2007 that reviewed employment arbitration awards under both the FAA and state arbitration laws); *see also* Michael H. LeRoy, *Do Partisan Elections of Judges Produce Unequal Justice When Courts Review Employment Arbitrations?*, 95 IOWA L. REV. 1569 (2010) (examining the impact of partisan election of state judges on courts' review of arbitration awards in employment disputes under the FAA and state arbitration acts).

[53] *Crowning the New King*, *supra* note 52, at 34.

[54] *Id.* at 40-41.

includes a much larger sample of contested motions to compel arbitration decided by all courts in all jurisdictions in a 12-month period. This sampling frame is therefore more recent and, in some ways, more comprehensive than those of previous studies. In essence, our study provides a snapshot of a year in the life of the FAA in the lower courts.

In sum, the theoretical arbitration literature has focused on the Supreme Court's FAA jurisprudence, largely ignoring the thousands of FAA cases decided by state and lower federal courts. As for the empirical arbitration literature, it has largely focused on the arbitration process itself and on arbitration's impact on contracts and contracting parties. However, the lower courts retain considerable discretion in interpreting and applying the FAA beyond the basic principles set out by the Supreme Court.[55] Lower courts therefore remain the gatekeepers of the FAA who decide when contractual arbitration agreements will be enforced and how they will be enforced. The factors that might impact these decisions present a significant missing piece in the FAA arbitration puzzle, which is crucial for understanding the actual operation of the act. For instance, do lower court judges tend to be divided along ideological lines in FAA cases as the Supreme Court has been at times?[56] Is there a difference in this regard between state and

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[55] Stephen G. Breyer, *Reflections on the Role of Appellate Courts: A View from the Supreme Court*, 8 J. APP. PRAC. & PROCESS 91, 93 (2006) ("most determinative legal interpretations occur [] in the federal courts of appeals, in the state supreme courts, and in state appellate courts."). Viewing the relationship between the Supreme Court and lower courts in "organizational terms," one scholar has described the Supreme Court's role as "to establish policies on a selected range of the issues faced by the judicial system. Subordinate courts have a responsibility to take these policies into account in their own more extensive decision-making activities." Lawrence Baum, *Lower-Court Response to Supreme Court Decisions: Reconsidering a Negative Picture*, 3 JUST. SYS. J. 208, 211 (1978). Positive response by lower courts to Supreme Court policy depends, among other things, on the clarity of the policy. *Id*.

[56] *See generally, e.g.,* Lamps Plus, Inc. v. Varela, 587 U.S. 176 (2019); *see also* Epic Sys. Corp. v. Lewis, 584 U.S. 497 (2018); Am. Exp. Co. v. Italian Colors Rest., 570 U.S. 228 (2013); AT&T Mobility LLC v. Concepcion, 563 U.S. 333 (2011); LEE EPSTEIN ET AL., *supra* note 26, at 237 (concluding that ideology plays "an increasing role at each level [of the federal judiciary] because the constraints on judicial discretion lessen as one moves up").

federal courts?[57] What is the impact of legal factors, such as the arguments raised by parties, and extra-legal factors, such as the type of dispute, on judicial decision-making in FAA cases? By answering these questions, this study contributes to the resolution of the FAA arbitration puzzle.

II. METHODOLOGY

The cases included in the study were collected between June 1, 2021, and May 31, 2022,[58] from three databases: Westlaw, Lexis, and Bloomberg.[59] First, we collected all published and unpublished, reported and unreported, state and federal court decisions rendered by all courts across the United States (other than the Supreme Court of the United States) which mentioned "Federal Arbitration Act" or "9 U.S.C."[60] Next, we read each of these decisions and identified those discussing, interpreting, and/or applying the FAA in an arbitration-related case. At this stage, the dataset contained 2,421 such cases.[61] We identified 1,543 cases involving motions to compel arbitration under the FAA.[62] After removing 93 uncontested

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[57] *See generally, e.g.*, Daniel R. Pinello, *Linking Party to Judicial Ideology in American Courts: A Meta-Analysis*, 20 JUST. SYS. J. 219, 241 (1999) (finding that political party association is a stronger attitudinal force in federal courts than in state courts).

[58] The authors continued to monitor FAA cases after the 12-month period of the study, and the number of yearly cases has been comparable to our study period.

[59] We recognize that these databases are unlikely to report all FAA court cases. *See generally, e.g.*, Christina L. Boyd et al., *Mapping the Iceberg: The Impact of Data Sources on the Study of District Courts*, 17 J. EMPIRICAL LEGAL STUD. 466, 468 (2020); *see also* Alexander A. Reinert, *Measuring Selection Bias in Publicly Available Judicial Opinions*, 38 REV. LITIG. 255, 260 (2019); Edward K. Cheng, *Detection and Correction of Case-Publication Bias*, 47 J. LEGAL STUD. 151 (2018); Rebecca Wexler, *Life, Liberty, and Trade Secrets: Intellectual Property in the Criminal Justice System*, 70 STAN. L. REV. 1343, 1429 (2018). Nonetheless, contested motions to compel arbitration—the subject of our study—are likely reported more consistently than uncontested motions. Moreover, our sample size is sufficiently large to provide a representative sample of all such cases.

[60] Some courts may apply the FAA without mentioning it. Those decisions would not be included in the dataset.

[61] Different decisions rendered in the same case were included and analyzed separately.

[62] We also included motions to stay proceedings pursuant to § 3 of the FAA, which instructs courts to "stay the trial of the action until such arbitration has been had in accordance with the terms of the agreement" upon the request of a party. 9 U.S.C. § 3. We also included appellate courts' decisions remanding the case to the lower court if the

motions to compel arbitration,[63] we formed the final dataset of 1,450 contested motions. We then conducted a content analysis, hand-coding for the outcome of these motions as well as for the variables discussed below.[64]

appellate court determined an arbitration-related issue in a motion to compel arbitration. We also realize that the appellate courts are not technically compelling or denying arbitration but rather remanding the case to the lower court with instructions to do so. Nonetheless, we code the outcome of appeals the same—compel/deny. The 876 excluded cases concerned motions to confirm, vacate, or modify an arbitration award as well as a variety of other motions (*e.g.*, motions to remand, motions for attorney's fees and costs, motions for stay pending appeal, and discovery-related motions) and holdings (*e.g.,* order of a jury trial on arbitrability questions, dismissal for lack of jurisdiction, abstention, or mootness). Some of the excluded cases mentioned the FAA but ultimately applied state arbitration law. For instance, courts applied state arbitration law where the dispute did not involve interstate commerce or the FAA's § 1 exemption for "transportation workers" applied. *See* 9 U.S.C. § 1.

[63] In these cases, either the parties agreed to refer the dispute to arbitration or the plaintiff did not raise arguments in opposition to the motion to compel. Of the 93 uncontested motions in our dataset, 66 were filed in the federal courts and 27 in state courts. There could be various reasons for a party to commence a lawsuit in court and then consent to arbitration or not oppose a motion to compel arbitration. One possible reason might be to toll the statute of limitations. *See* Christopher R. Drahozal, *Mandatory Stay or Discretion to Dismiss? Interpreting Section 3 of the Federal Arbitration Act*, 39 OHIO STATE J DISP. RES 109, 143-44 (2023). Another possible reason might be to try and renegotiate better terms for the arbitration, to obtain, for instance, a different arbitration institution, particular rules of evidence, etc.

[64] In using content analysis methodology:

> a scholar collects a set of documents, such as judicial opinions on a particular subject, and systematically reads them, recording consistent features of each and drawing inferences about their use and meaning. . . . The method combines a disciplined focus on legal subject matter with an assumption that other investigators should be able to replicate the research results.

Mark A. Hall & Ronald F. Wright, *Systematic Content Analysis of Judicial Opinions*, 96 CAL. L. REV. 63, 64-65 (2008). Content analysis is particularly useful "to capture more comprehensively specific features of judicial decisions." Richard Kirkham & Elizabeth A. O'Loughlin, *A Content Analysis of Judicial Decision-Making, in* ROUTLEDGE HANDBOOK OF SOCIO-LEGAL THEORY AND METHODS (Naomi Creutzfeldt et al. eds., 1st ed. 2019) (applying the method to study judicial review of ombudsman decisions in UK public law).

A. *Outcomes*

The data was coded for the following outcomes:

Outcome	Description
Arbitration Compelled	The court granted a motion to stay court proceedings and/or a motion to compel arbitration.
Arbitration Compelled in Part	The court granted a motion to stay court proceedings and/or a motion to compel arbitration with respect to some of the parties and/or claims and denied the motion with respect to other parties and/or claims.
Arbitration Denied	The court denied a motion to stay court proceedings and/or a motion to compel arbitration.

B. *Variables*

The data was also coded for six variables—four internal to the court deciding the motion to compel arbitration and two external to it. The internal variables are: 1) type of court, 2) level of court, 3) location of the court, and 4) the political association of the judge(s) deciding the motion to compel arbitration. The external variables are: 1) the type of dispute underlying the motion to compel arbitration and 2) the arguments raised by the party opposing the motion.

1. The Type, Level, and Location of the Court

The type of court is defined as either state or federal, regardless of the level of court within each system. The level of court is defined as either a federal district court (including bankruptcy court), a federal circuit court of appeals, a state trial court, a state intermediary appellate court, or a state's highest appellate court. The location of state courts and federal district courts is defined according to the state in which the court was located. The location of the federal circuit courts of appeals is defined according to the federal circuit.

2. The Political Association of the Judge(s)

The political association of the judge(s) was coded differently, depending on the level of their court.[65] For federal judges,[66] we used the political association of the President who nominated the judge to the position they were in at the time of deciding the motion to compel arbitration.[67] For state judges, if the judge was appointed by a Governor, even if they were subject to a retention election or a state legislature oversight hearing, we coded the judge by that Governor's political association. State judges who were elected in partisan races are coded by the party whose association they ran with.[68]

For single federal district court as well as state trial judges, the judicial association is coded as either "Democratic," "Republican," or "N/A" (for magistrate and bankruptcy judges). For the federal circuit courts of appeals, state intermediary appellate courts, and state highest appellate courts, we coded on the basis of

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[65] We obtained this information from https://ballotpedia.org/ [https://perma.cc/LBZ3-4QBL]. We recognize that the political aspects of arbitration do not necessarily lend themselves to Democratic versus Republican categorization. For instance, some Republican judges may be more inclined to compel arbitration because they are "pro-business" and "pro-freedom of contract," but they may simultaneously be less inclined to compel arbitration under the FAA where it operated to pre-empt state law. Similarly, some Democratic judges may be more inclined to deny arbitration because they are "anti-business," but they may simultaneously be less inclined to deny arbitration because it upholds the role of federal legislation over the affairs of interstate commerce broadly defined.

[66] Magistrate judges and bankruptcy judges were not coded for political affiliation.

[67] *See* SUNSTEIN ET AL., *supra* note 26, at 113. Accordingly, federal circuit courts of appeals judges were coded according to the party of the President who nominated them to the circuit court regardless of whether the judge had been serving on another court prior to that and was nominated to that position by a President of a different party. On the differences in voting between judges appointed by different presidents from the same party, we recognize that many district court judges are appointed at the behest of the Senator of their state even if the Senator's political association is different from the President's. Moreover, we recognize that some states use commissions to identify and recommend potential federal judges to the Senator. However, given that all Article III federal judges are ultimately nominated by the President and confirmed by the Senate, the President's political party remains a relevant proxy for the general political leaning of federal judges.

[68] State judges who were non-partisan were not coded for political association.

the political association of the panels. We coded these panels as follows:[69]

- ◊ "Democratic:" For panels comprised of all-Democratic judges regardless of whether the decision was unanimous or split.[70]
- ◊ "Republican:" For panels comprised of all-Republican judges regardless of whether the decision was unanimous or split.[71]
- ◊ "Democratic Majority:" For mixed panels with a majority of Democratic-appointed or elected judges, including if the panel was split in its decision but the Democratic judges were in the majority.[72]
- ◊ "Republican Majority:" For mixed panels with a majority of Republican-appointed or elected judges, including if the panel was split in its decision but the Republican judges were in the majority.[73]
- ◊ "N/A:" For elected non-partisan state panels as well as split panels with no political majority.[74]

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[69] *See* SUNSTEIN ET AL., *supra* note 26, at 8-9 (discussing the impacts of mixed panels on judicial voting and labeling these impacts as "ideological dampening" and "ideological amplification").

[70] There were four cases involving a panel comprised of all-Democratic judges with one dissenting judge: Casa Ford, Inc. v. Jose Armendariz, No. 08-20-00084-CV, 2021 WL 3721718 (Ct. App. Tex. Aug. 23, 2021); Casa Ford, Inc. v. Warner, No. 08-20-00089-CV, 2021 WL 3721716 (Ct. App. Tex. Aug. 23, 2021); Prestonwood Tradition, LP v. Jennings, 636 S.W.3d 68 (Ct. App. Tex. 2021); Pena v. St. Theresa Healthcare and Rehab. Ctr., No. A-1-CA-38207, 2022 WL 611553 (Ct. App. N.M. 2022).

[71] There were three cases involving a panel comprised of all-Republican judges with one dissenting judge: AtriCure, Inc. v. Meng, 12 F.4th 516 (6th Cir. 2021); Moncrief v. Moncrief, 672 S.W.3d 156 (Ct. App. Tex. 2023); Airbnb, Inc. v. Doe, 336 So.3d 698 (Fla. 2022).

[72] There were 86 cases involving a mixed panel with a majority of Democratic-appointed or elected judges.

[73] There were 68 cases involving a mixed panel with a majority of Republican-appointed or elected judges.

[74] This category also includes judges elected directly by the legislature, *e.g.*, in Virginia.

3. The Type of Dispute

The type of dispute is coded as either: 1) employment, 2) labor, 3) consumer, 4) business, or 5) international.

Employment disputes include all domestic disputes arising in the employment context, including those involving statutory claims and the Employee Retirement Income Security Act of 1974 (ERISA).[75]

Labor disputes include all domestic disputes between an employer and a union pursuant to a collective bargaining agreement.[76]

Consumer disputes include all domestic disputes arising in the consumer context, including claims brought pursuant to consumer protection laws under warranties, disputes that were subject to institutional consumer arbitration rules, individual bankruptcy-related disputes, and other cases that were brought by an individual consumer/customer, such as under insurance policies, construction and legal retainer contracts, securities laws, landlord-tenant disputes, disputes involving tort claims for personal injury, and wrongful death claims.

Business disputes include domestic disputes between corporate entities, commercial insurance disputes as well as disputes that involve individuals but that do not arise in the employment or consumer contexts, such as franchise disputes, shareholder disputes, corporate bankruptcy-related disputes, and contractual employment disputes involving executives or professionals in the securities industry.

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[75] 29 U.S.C. §§ 1001-1461.

[76] The dataset only includes labor cases where the FAA was applied. Cases under 29 U.S.C. § 301, which is part of the Labor Management Relations Act, were excluded.

Finally, international disputes include all cases involving an arbitration agreement falling under Chapter 2[77] or Chapter 3[78] of the FAA regardless of their subject matter.[79]

4. The Arguments Raised

We coded for four types of arguments raised by the party opposing the motion to compel arbitration: 1) arguments impugning the existence and/or formation of the arbitration agreement, 2) arguments challenging the scope of the arbitration agreement, 3) arguments challenging the arbitration agreement on unconscionability grounds, and 4) arguments that the party seeking to compel arbitration has waived its right to do so.

Existence/formation challenges include evidentiary claims regarding the existence of the arbitration agreement; arguments that the parties' agreement does not constitute an "arbitration" agreement (but rather provides for a different process); lack of mutual assent, consideration, offer, or acceptance; absence of a clear waiver of the right to sue in court; absence of essential terms; fraudulent inducement/execution;[80] an illusory contract; and a non-

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[77] Chapter 2 of the FAA implements the Convention on the Recognition and Enforcement of Foreign Arbitral Awards. *See generally* Convention on the Recognition and Enforcement of Foreign Arbitral Awards, June 10, 1958, 21 U.S.T. 2518, 330 U.N.T.S 3.

[78] Chapter 3 of the FAA implements the Inter-American Convention on International Commercial Arbitration. *See generally* Inter-American Convention on International Commercial Arbitration, January 30, 1975, 80 Stat. 271, 1438 U.N.T.S. 245.

[79] Cases with a foreign element where the court did not apply either Chapter 2 or 3 of the FAA were coded as domestic cases. See, e.g., Mitas Endustri Sanayi Ticaret A.S. v. Valmont Indus., Inc., No. 20-1285-CFC, 2021 WL 3169301 (D. Del. July 27, 2021); Leo Middle East FZE, et al. v. Zhe Zhang, et al., No. 21-cv-03985-CRB, 2022 WL 207663 (N.D. Cal. 2022).

[80] We recognize that there is a distinction between fraudulent inducement and fraudulent execution. Fraud in the inducement is:

> [f]raud occurring when a misrepresentation leads another to enter into a transaction with a false impression of the risks, duties, or obligations involved; an intentional misrepresentation of a material risk or duty reasonably relied on, thereby injuring the other party without vitiating the contract itself, esp. about a fact relating to value or the ability to perform.

Fraud, BLACK'S LAW DICTIONARY (11th ed. 2019). In contrast, fraud in the execution (or factum) is "[f]raud occurring when a legal instrument as actually executed differs from the one intended for execution by the person who executes it, or when the instrument

signatory.[81] While parties challenging arbitration agreements also frequently argued that they did not read the agreement, this claim was not coded as an independent challenge to the existence/formation of the arbitration agreement because such a claim was never considered by any court as a legitimate legal argument. At times, this claim accompanied other arguments, such as unconscionability, which we coded.

Challenges to the scope of arbitration agreements include arguments concerning the wording of the agreement and whether this wording suggests a broad or narrow scope (for instance, such that it covers statutory claims), as well as arguments that the dispute does not arise out of the contractual relationship between the parties (for instance, in cases involving tort claims).

Unconscionability challenges include arguments concerning the procedural and/or substantive unconscionability of arbitration agreements.[82] Such arguments may be based, for instance, on the

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may have had no legal existence." *Id.* Courts have treated these two types of fraud differently in the context of arbitration agreements—fraud in the execution as an issue of existence/formation and fraud in the inducement as an issue of validity. *See, e.g.*, Pickett v. Lyft, Inc., No. 20-6389, 2022 WL 1557667, at *7 (E.D. Pa. May 16, 2022); Ackies v. Scopely, Inc., No. 19-cv-19247, 2022 WL 214541, at *7 (D.N.J. Jan. 25, 2022); Edwards v. Pfannenstiehl, No. 1:18-cv-03170-RLY-DLP, 2021 WL 9218884, at *2-*3 (S.D. Ind. Oct. 20, 2021). For present purposes, we treat both as existence/formation issues.

[81] For the purposes of this article, a non-signatory is a party to the court proceedings that did not sign the arbitration agreement but that seeks to compel a signatory to arbitrate, or a signatory that is seeking to compel the non-signatory party to arbitrate. Traditional principles of contract law applicable to the enforcement of contracts by or against non-signatories apply also in the arbitration context, including incorporation by reference, assumption, agency, veil-piercing/alter ego, and estoppel. Most courts considered a non-signatory argument to be a type of existence/formation argument. In a handful of cases, the court explicitly treated the non-signatory argument as a scope argument, and in those instances, we coded it as such. *See, e.g.* Reeves v. Enter. Prods. Partners, LP, 17 F.4th 1008, 1011 (10th Cir. 2021) ("The scope of the arbitration agreement, including the question of who it binds, is a question of state contract law").

[82] Many state contract laws require a showing of both substantive and procedural unconscionability to invalidate a contract, including an arbitration agreement. *See, e.g.*, Stuckey v. Brookdale Emp. Servs., LLC, No. 5:21-cv-01717-AKK, 2022 WL 1156962, at *6 (N.D, Ala. Apr. 19, 2022) (Alabama law); Orozco v. Gruma Corp., No. 1:20-cv-1290 AWI EPG, 2021 WL 4481061, at *5 (E.D. Cal. Sept. 30, 2021) (California law); Campbell v. Keagle, Inc. No. 20-cv-2271, 553 F.Supp.3d 492, 495 (C.D. Ill. 2021), *vacated and remanded*, 27 F.4th 584 (7th Cir. 2022) (Illinois law); Finch v. Lowe's Home Ctrs., LLC, No. 3:20-cv-02981-JMC, 2021 WL 2982863, at *6 (D.S.C. July 15, 2021) (North Carolina law); Custom Hair Designs By Sandy, LLC, et al v. Cent. Payment Co., LLC, No. 8:17-cv-310, 2021 WL 5868204, at *6 (D. Neb. Dec. 9, 2021) (Nebraska law); Clark v. Am.

presence of unilateral modification provisions,[83] provisions limiting statutory remedies,[84] cost-and-fee-shifting provisions,[85] attorneys' fees provisions,[86] confidentiality provisions,[87] "loser pays" provisions,[88] a one-sided duty to arbitrate,[89] unreasonable time-limits to submit a claim to arbitration,[90] or unequal process for the selection of arbitrators.[91]

Challenges based on a waiver of the right to compel arbitration typically include arguments that the party seeking to compel arbitration has acted inconsistently with this right by substantially invoking the litigation process, for instance, by participating in discovery.

Memorial Life Ins. Co., No. 2:21-cv-00399, 2021 WL 5235993, at *3 (S.D. W. Va. Nov. 10, 2021 (West Virginia law); Maity v. Tata Consultancy Servs., Ltd., No. 19-cv-19861 (KSH) (CLW), 2021 WL 6135939, at *5 (D.N.J. Dec. 29, 2021) (New Jersey law); Bailey v. Thompson Creek Window Co., No. 21-00844-LKG, 2021 WL 5053094, at *5 (D. Md. Nov. 1, 2021) (Maryland law); Eckstein v. E. Coast Facilities Inc., No. C21-257 MJP, 2021 WL 3173044, at *4 (W.D. Wash. July 26, 2021) (Pennsylvania law); Castillo v. Plaza Motors Of Brooklyn, Inc., No. 20-cv-4337 (NGG) (PK), 2021 WL 8820236, at *3 (E.D.N.Y. Sept. 14, 2021) (New York law). If the arbitration agreement is permeated with unconscionability, the offending provisions are generally not severable, and the entire agreement would be unenforceable. *See, e.g.*, Al-Safin v. Cir. City Stores, Inc., 394 F.3d 1254, 1262 (9th Cir. 2005) (refusing to enforce an arbitration agreement because it was "permeated with unconscionable provisions").

[83] Aldrete v. Metro Auto Auction LLC, No. cv-21-00622-PHX-SMB, 2022 WL 60544, at *4-5 (D. Ariz. Jan. 6, 2022).

[84] Doe 1 v. Darden Rests., Inc., No. 3:20-cv-00862, 2022 WL 265949, at *9 (M.D. Pa. Jan. 27, 2022).

[85] Streety v. Parsley Energy Operations, LLC, No. MO:20-cv-49-DC-RCG, 2022 WL 2782819, at *9 (W.D. Tex. May 3, 2022).

[86] Casa Ford, Inc. v. Armendariz, No. 08-20-00084-CV, 2021 WL 3721718, at *3 (Tex. App. Aug. 23, 2021).

[87] Ward v. Crow Vote LLC, No. SACV 21-cv-01110-JVS, 2021 WL 5927803, at *8 (C.D. Cal. Oct. 7, 2021).

[88] *Campbell*, 553 F.Supp.3d at 498.

[89] Mason v. St. Vincent's Home, Inc., 199 N.E.3d 346, 354 (Ill. App. Ct. 2022).

[90] *Streety*, 2022 WL 2782819, at *7.

[91] *Campbell*, 553 F.Supp.3d at 497-98.

The table below lists all of variables tested:

Variable	Description
Internal Variables	
Type of Court	Federal/state court
Level of Court	At the state level—trial, intermediary appellate, and highest appellate At the federal level—district court and circuit court of appeals
Location of Court	At the state level—state the court is located in At the federal level—state and federal circuit the court is located in
Political Association of the Judge or Majority Judges	At the state level—either the political association of the nominating Governor or the judge's own political association, if known At the federal level—the political association of the nominating President
External Variables	
Type of Dispute	(1) Employment (2) Labor (3) Consumer (4) Business (5) International
Arguments Raised by Counsel Seeking to Defeat a Motion to Compel Arbitration	(1) Existence/formation (2) Scope (3) Unconscionability (4) Waiver

C. *Analysis*

We analyzed the data in two stages. In the first stage, we examined the frequencies of the variables and the outcomes to ascertain the basic relationships between them. While many insights can be drawn from basic frequency analysis, it is limited in that it only measures the variation of one variable or at best, two variables. Therefore, in the second stage of our analysis, we examined the relationships between the variables and the outcomes of the cases using multinomial logistic regressions.

Multinomial regressions allow us to examine the impact of many variables, known as independent variables, on the occurrence or lack of occurrence of a specific variable, which is called the dependent variable. The idea is to think of the dependent variable being related to a set of independent variables. Regression analysis seeks to measure the impact of the various independent variables upon the dependent variable. In addition to measuring the impact of the presence of specific variables on the outcome variable, the analysis can also inform us about which specific variables have a statistically significant impact on the outcome given the presence of all the other independent variables in the analysis. The reader can consult any textbook on the subject, and our discussion below assumes some familiarity with the broad subject of regression analysis.[92]

III. FINDINGS

In this Part, we present the results of each stage of the empirical study—frequencies analysis and multinomial logistic regression analysis. Each stage provides a different perspective from a statistical point of view, and together they compile a nuanced picture of motions to compel arbitration under the FAA in the lower courts. The tables containing our results are contained in the Appendix.

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[92] *See generally* MICHAEL O. FINKELSTEIN & BRUCE LEVIN, STATISTICS FOR LAWYERS, 369-505 (Stephen E. Fienberg et al. eds., 3rd ed. 2015) (overviewing regression analysis).

A. *Stage One: Frequencies*

In terms of the outcomes of the cases we collected, 67.0% of the 1,450 motions to compel arbitration were granted (971 cases), 5.0% arbitration were granted in part (73 cases), and 28.0% were denied (406 cases).

1. Type of Dispute

As explained above, we coded the cases as employment, labor, consumer, business, or international disputes. This classification allows us to examine the nature of the disputes underlying motions to compel arbitration and their relationship with other variables in our study. *Tables 1A-1F* set out the outcome of motions to compel arbitration by type of dispute and type of court.[93]

i. Employment Disputes

The most common disputes in our dataset were employment disputes, with 39.5% of motions to compel arbitration, out of which 77.3% were granted in whole or in part.[94] In federal district courts, employment disputes were compelled to arbitration in whole or in part in 82.4% of cases.[95] In federal circuit courts of appeals, employment disputes were compelled to arbitration in 57.6% of cases.[96] In state trial courts, employment disputes were compelled to arbitration in whole or in part in 88.4% of cases.[97] In state intermediary appellate courts, employment disputes were compelled to arbitration in whole or in part in 40.6% of cases,[98] while in states' highest appellate courts, three out of the four employment disputes submitted to these courts were compelled to arbitration.[99]

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[93] *See infra* Tables 1A-1F.

[94] *See infra* Table 1A. 22% of employment disputes involved a purported class action. This result is not reported in the tables. The data can be made available upon request.

[95] *See infra* Table 1B.

[96] *See infra* Table 1C.

[97] *See infra* Table 1F.

[98] *See infra* Table 1E.

[99] *See infra* Table 1D.

ii. Consumer Disputes

A close second to employment disputes were consumer disputes, with 39.0% of motions to compel arbitration, out of which 66.7% were granted in whole or in part.[100] In federal district courts, consumer disputes were compelled to arbitration in whole or in part in 76.7% of cases.[101] In federal circuit courts of appeals, consumer disputes were compelled to arbitration in 50.0% of cases.[102] In state trial courts, consumer disputes were compelled to arbitration in whole or in part in 68.7% of cases.[103] In state intermediary appellate courts, consumer disputes were compelled to arbitration in whole or in part in 45.9% of cases,[104] while in states' highest appellate courts six out of the eleven consumer disputes submitted to these courts were compelled to arbitration.[105]

iii. Business Disputes

The third most common category, business disputes, comprised 17.1% of motions to compel arbitration, out of which 71.0% were granted in whole or in part.[106] In federal district courts, business disputes were compelled to arbitration in whole or in part in 78.2% of cases.[107] In federal circuit courts of appeals, business disputes were compelled to arbitration in 31.3% of cases.[108] In state trial courts, business disputes were compelled to arbitration in whole or in part in 78.6% of cases.[109] In state intermediary appellate courts, business disputes were compelled to arbitration in whole or in part in 48.2% of cases,[110] while in states' highest appellate courts

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[100] *See infra* Table 1A. 21.9% of consumer disputes involved a purported class action. This result is not reported in the tables. The data can be made available upon request.

[101] *See infra* Table 1B.

[102] *See infra* Table 1C.

[103] *See infra* Table 1F.

[104] *See infra* Table 1E.

[105] *See infra* Table 1D.

[106] *See infra* Table 1A. Also, out of these business disputes, 8.9% involved insurance disputes. This result is not reported in the tables. The data can be made available upon request.

[107] *See infra* Table 1B.

[108] *See infra* Table 1C.

[109] *See infra* Table 1F.

[110] *See infra* Table 1E.

three out of the seven business disputes submitted to these courts were compelled to arbitration.[111]

iv. International Disputes

International disputes comprised 2.3% of motions to compel arbitration, out of which 90.9% were granted in whole or in part.[112] In federal district courts, international disputes were compelled to arbitration in whole or in part in 93.1% of cases.[113] In federal circuit courts of appeals, two out of the three international disputes submitted to these courts were compelled to arbitration.[114] One international arbitration case was submitted to a state intermediary appellate court, in which the court compelled arbitration.[115]

v. Labor Disputes

Finally, labor disputes comprised 2.1% of motions to compel arbitration, out of which 58.1% were granted in whole or in part.[116] In federal district courts, labor disputes were compelled to arbitration in 58.3% of cases.[117] In federal circuit courts of appeals, three out of the four labor disputes submitted to these courts were compelled to arbitration.[118] One labor case was compelled to arbitration by a state trial court while in two labor disputes, arbitration was denied by state intermediary appellate courts.[119]

vi. Conclusion—Type of Dispute

The above results show that employment and consumer disputes are the most frequent types of disputes underlying motions to compel arbitration, followed by business disputes, international disputes, and labor disputes. The most frequently compelled type of disputes were international disputes, which were submitted almost

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111 *See infra* Table 1D.
112 *See infra* Table 1A.
113 *See infra* Table 1B.
114 *See infra* Table 1C.
115 *See infra* Table 1E.
116 *See infra* Table 1A.
117 *See infra* Table 1B.
118 *See infra* Table 1C.
119 *See infra* Table 1E.

exclusively to federal district courts. Following were employment disputes, with a slightly higher compel rate at the state than the federal trial courts. Business disputes were compelled at a slightly lower rate than employment disputes and at roughly the same rate by state and federal trial courts. Consumer disputes followed but with a higher compel rate at the federal than the state trial courts. Finally, the least compelled type of disputes were labor disputes, which were predominantly decided by federal district courts. In appellate courts, both federal and state, the rate of compelling arbitration was around 50% in most types of disputes.[120]

2. Arguments

A party to a court action—typically the plaintiff—who opposes a motion to compel its claims to arbitration filed by another party to the court action—typically the defendant—will usually raise one or more types of arguments in order to defeat the motion to compel arbitration. To understand the impact of these arguments, we measured the rate at which courts denied motions to compel arbitration on the basis of each argument against the rate at which parties raised that argument.

i. Existence/Formation

The most common arguments raised by parties to challenge a motion to compel arbitration related to the existence/formation of the arbitration agreement, accounting for 63.0% of the arguments raised in all motions to compel.[121] Of the existence/formation arguments raised, 44.1% were in consumer disputes, 37.4% in employment disputes, 15.6% in business disputes, 2.0% in international disputes, and 1.0% in labor disputes.[122]

Existence/formation arguments were also the most successful relative to all other arguments. Out of all the 913 cases in which existence/formation arguments were raised, 32.4% were successful (meaning that the court accepted the argument and denied the

[120] As noted above, there was a low number of observations for business, international, and labor disputes in the appellate courts. *See infra* Tables 1A-1F.

[121] *See infra* Table 2A.

[122] *See infra* Table 2A.

motion to compel arbitration).[123] Furthermore, existence/formation arguments were most successful in consumer disputes with 40.7%, followed closely by business disputes with 38.0%.[124]

ii. Scope

The second most common arguments raised by parties to challenge a motion to compel arbitration related to the scope of the arbitration agreement, totaling 32.9%.[125] Of the scope arguments raised, 33.8% were in consumer disputes, 32.9% in employment disputes, 25.2% in business disputes, 5.2% in labor disputes, and 2.9% in international disputes.[126]

Out of all 477 cases in which scope arguments were raised, 18.7% were successful (meaning the court accepted the argument and denied the motion to compel arbitration).[127] Furthermore, scope arguments were most successful in labor disputes, totaling 36%.[128]

It is important to note that parties may include a "delegation" clause in their arbitration agreement in order to "delegate" scope questions to the arbitrator. Where there is "clear and unmistakable" evidence of such delegation, courts are not to decide these scope questions but should rather refer them to the arbitrator unless they find that the delegation clause itself is invalid.[129] There were a total of 332 cases in the dataset, amounting to 23%, in which a party argued that the challenge to the arbitration agreement had been delegated to the arbitrator.[130]

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[123] Out of these successful cases, in 55.7% the existence/formation argument was the presence of a non-signatory party. This result is not reported in the tables. The data can be made available upon request.

[124] These results are not reported in the tables. The data can be made available upon request.

[125] *See infra* Table 2B.

[126] *See infra* Table 2B.

[127] This result is not reported in the tables. The data can be made available upon request.

[128] This result is not reported in the tables. The data can be made available upon request.

[129] *See, e.g.*, First Options of Chi., Inc. v. Kaplan, 514 U.S. 938, 944 (1995); *see also* Rent-A-Ctr., W., Inc. v. Jackson, 561 U.S. 63, 79-80 (2010); Henry Schein, Inc. v. Archer and White Sales, Inc., 586 U.S. 63, 69-70 (2019).

[130] Out of those cases, 41.6% of delegation arguments were raised in consumer disputes, 34.0% in employment disputes, 20.2% in business disputes, 3.0% in international disputes, and 0.9% in labor disputes. These results are not reported in the tables. The data can be made available upon request.

Moreover, 29.4% of the motions to compel arbitration included in the dataset in which parties raised a scope argument also involved an argument that the court should refer the scope question to the arbitrator on the basis of a delegation clause.[131] Out of those cases (that is, cases that contained both scope and delegation arguments), in 60.4%, the delegation argument was accepted, and the scope question was therefore referred to the arbitrator.[132] Even though courts are required to refer scope questions to arbitration in the face of a valid delegation clause, in 39.6% of the cases where both scope and delegation arguments were raised, the courts proceeded to opine on the scope question.[133] In 67.3% of those cases, the courts rejected the scope arguments on their merits.[134] Most courts justified their consideration of the scope arguments by finding that the purported delegation clause did not evidence the parties' "clear and unmistakable" intent to delegate the scope question to the arbitrator or that the delegation clause was itself invalid.

iii. Unconscionability

The third most common argument raised by parties to challenge a motion to compel arbitration was unconscionability, totaling 27.5%.[135] For the unconscionability argument, 57.4% were raised in employment disputes, 35.1% in consumer disputes, 6.8% in business disputes, 0.5% in labor disputes, and 0.3% in international disputes, respectively.[136]

Out of all 399 cases in which unconscionability arguments were raised, 6.8% (twenty-seven cases) were successful (meaning

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[131] This result is not reported in the tables. The data can be made available upon request.

[132] We coded these cases as the court rejecting the scope argument and compelling arbitration.

[133] This result is not reported in the tables. The data can be made available upon request.

[134] In two cases, the court decided that some of the claims were within the scope of the arbitration agreement, and some were outside of it. See, Nelson v. Area Wide Protective, Inc., No. 1:21-cv-00895 (AJT/IDD). 2021 WL 10352732, at *7-8 (E.D. Va. Dec. 8, 2021); Ullrich v. Ullrich, No. 3:21-cv-147-TJC-PDB, 2021 WL 6884736, at *23 (M.D. Fa. Sept. 3, 2021).

[135] *See infra* Table 2C.

[136] *See infra* Table 2C.

the court accepted the argument and denied the motion to compel arbitration).[137] Out of these twenty-seven cases, unconscionability arguments were most successful in employment disputes (sixteen cases), followed by consumer disputes (nine cases).[138] In 12% of cases in which unconscionability arguments failed (meaning the motion to compel arbitration was granted), the court found at least one unconscionable provision in the arbitration agreement but nonetheless enforced the agreement by severing the offending provision(s).[139]

As with scope arguments, parties may "delegate" unconscionability questions to the arbitrator. Of the motions to compel arbitration in the dataset in which parties raised an unconscionability argument, 24% also involved an argument that the court should refer the unconscionability question to the arbitrator on the basis of a delegation clause.[140] Out of those cases (that is, cases that contained both unconscionability and delegation arguments), in 66.7% the delegation argument was accepted, and the unconscionability question was referred to the arbitrator.[141] Again, it is interesting to note that even though courts are required to refer unconscionability questions to arbitration in the face of a delegation clause, in 33.3% of the cases where both unconscionability and delegation arguments were raised the courts proceeded to opine on the unconscionability question, for much of the same reasons noted above in the context of scope arguments.[142]

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[137] This result is not reported in the tables. The data can be made available upon request.

[138] Business disputes were technically the most successful, but the number of cases was very low. These results are not reported in the tables. The data can be made available upon request.

[139] This result is not reported in the tables. The data can be made available upon request.

[140] This result is not reported in the tables. The data can be made available upon request.

[141] We coded these cases as the courts rejecting the unconscionability argument and compelling arbitration. In 21.2% of these cases, the court first determined that the delegation clause itself was not unconscionable, and then referred the question of the unconscionability of the arbitration agreement to the arbitrator. More extra details for authors' own dataset, so unsure if anything extra would be needed.

[142] These results are not reported in the tables. The data can be made available upon request.

In 87.5% of those cases, the courts rejected the unconscionability argument on its merits.[143]

iv. Waiver

Finally, in 13.6% of motions to compel arbitration, a party challenged the arbitration agreement on the ground that the party seeking arbitration had waived its right to do so.[144] Of the waiver arguments, 38.6% were raised in consumer disputes, 38.1% in employment disputes, 19.8% in business disputes, 2.0% in international disputes, and 1.5% in labor disputes.[145]

Out of all 197 cases in which waiver arguments were raised, 19.8% were successful (meaning the court accepted the argument and denied the motion to compel arbitration).[146] Furthermore, 21.3% of waiver arguments were most successful in employment disputes, followed closely by 20.5% in business disputes and 18.4% in consumer disputes.[147]

v. Conclusion—Arguments

In terms of the frequency with which various arguments were raised by the parties, existence/formation arguments were the most commonly raised, followed by scope, unconscionability, and waiver arguments. All arguments other than unconscionability were raised most commonly in consumer disputes. Unconscionability was raised most commonly in employment disputes. The most successful arguments overall were those relating to the existence/formation of arbitration agreements (mostly on non-signatory grounds), followed by waiver of the right to arbitrate, scope of arbitration agreements, and unconscionability.

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[143] State intermediary appellate courts accepted unconscionability arguments at the highest rate (21.4%), followed by federal circuit courts of appeals (16.7%). In contrast, federal district courts only accepted these arguments at a rate of 6.1% and state trial courts at a rate of 2.7%. These results are not reported in the tables. The data can be made available upon request.

[144] *See infra* Table 2D.

[145] *See infra* Table 2D.

[146] This result is not reported in the tables. The data can be made available upon request.

[147] Labor disputes were technically the most successful, but the number of cases was very low. These results are not reported in any table. The data can be made available upon request.

3. Type, Level and Location of Court

Federal courts decided 62.5% of all motions to compel arbitration in the dataset while 37.5% of motions were decided by state courts.[148] While this difference is stark, we note that due to the limitations of the databases used to collect our cases as well as the nature of state court case reporting more generally, a significant number of motions to compel arbitration decided by state courts were likely not included in our dataset.

i. Federal Courts

Federal courts granted motions to compel arbitration in whole or in part in 76.6% of their cases while state courts granted such motions in whole or in part in 64.3% of their cases.[149]

Within our sample of the federal courts, 90.3% of motions to compel arbitration were decided by district courts.[150] Only eighty-eight cases were decided by the federal circuit courts of appeals.[151] The district courts granted motions to compel arbitration, in whole or in part, in 79.3% of the cases before them[152] while the courts of appeals granted such motions in 51.1% of the appeals before them.[153] Although this compel rate is much lower than the district courts, 72.4% of the successful appeals reversed a denial of a motion to compel.[154]

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[148] *See infra* Table 3A.

[149] *See infra* Table 3A.

[150] *See infra* Table 3A.

[151] *See infra* Table 3A.

[152] Some motions to compel arbitration were denied by federal courts for lack of subject-matter jurisdiction. The FAA does not itself create such jurisdiction. Rather, a federal court must have an "independent jurisdictional basis" to hear the case. Hall Street Assocs., L.L.C. v. Mattel, Inc., 552 U.S. 576, 581-82 (2008).

[153] *See infra* Table 3A.

[154] *See infra* Table 3B. We recognize the FAA has a one-sided appeal provision that permits interlocutory appeals from a denial of a motion to compel but not from a decision compelling arbitration. 9 U.S.C. § 16(b). Nevertheless, 37.5% of appeals before the federal circuit courts of appeals (whether successful or unsuccessful) were from decisions compelling arbitration. That is because § 16(a)(3) of the FAA allows appeals from "a final decision with respect to an arbitration," and some circuit courts have found that they have jurisdiction to hear appeals from decisions to compel arbitration and dismiss, rather than stay, court proceedings. *Id.* at § 16(a)(3). The Supreme Court has recently held that the FAA does not permit such a dismissal instead of a stay of proceedings. *See*, Smith v. Spizzirri, 601 U.S. 472 (2024). *See* Christopher R. Drahozal, *supra* note 63, at

ii. State Courts

Among the state courts, 57.7% of motions to compel arbitration were decided by trial courts, 38.2% were decided by intermediary appellate courts, and only 4% (twenty-two cases) were decided by states' highest courts.[155] State trial courts compelled arbitration, in whole or in part, in 78.3% of their cases while intermediary appellate courts compelled arbitration, in whole or in part, in 44.2% of appeals before them, and states' highest courts compelled arbitration in 54.6% of appeals before them.[156] Again, while this rate of compel is much lower than the state trial courts, 81.9% of successful appeals before state intermediary and highest appellate courts reversed a denial of a motion to compel.[157]

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111. For decisions dismissing the case after compelling it to arbitration, *see, e.g.*, Anderson v. Charter Commc'ns, Inc., 860 Fed. App'x 374, 380 (2021) ("we have appellate jurisdiction when a district court . . . dismiss[es] a suit in this setting."); *see also* Capriole v. Uber Techs., Inc., 7 F.4th 854, 860 (9th Cir. 2021) ("A 'district court's decision to grant or deny a motion to compel arbitration is reviewed de novo[.]'"); Carrone v. UnitedHealth Grp. Inc, No. 20-2742, 2021 WL 3520809, at *1 (3d Cir. 2021) ("We have appellate jurisdiction under 28 U.S.C. § 1291 and 9 U.S.C. § 16(a)(3)."); Butler v. Z&H Foods, Inc., No. 21-20086, 2021 WL 4073110, at *1 (5th Cir. 2021) ("We review the district court's order compelling arbitration *de novo*."); Cheruvoth v. SeaDream Yacht Club Inc., No. 20-14450, 2021 WL 4595177, at *1 (11th Cir. 2021) ("We review the district court's order compelling arbitration *de novo*."); K.F.C. v. Snap Inc., 29 F.4th 835, 837 (7th Cir. 2022) ("Because the judge dismissed the suit outright, 9 U.S.C. § 16(a)(3) allows her to appeal[.]"); Bissonnette v. LePage Bakeries Park St., LLC, 49 F.4th 655, 659 (2d Cir. 2022) ("We have jurisdiction over the district court's order compelling arbitration and dismissing the case because it is a 'final decision with respect to an arbitration' pursuant to Section 16(a)(3) of the FAA.").

155 *See infra* Table 3A.

156 *See infra* Table 3A.

157 *See infra* Table 3C. The FAA's one-sided appealability rule, discussed in *supra* note 154, may not apply in state appellate courts. Badgerow v. Walters, 596 U.S. 1, 8 n.2 (2022) ("This Court has held that the FAA's core substantive requirement—Section 2's command to enforce arbitration agreements like other contracts—applies in state courts, just as it does in federal courts. We have never decided whether the FAA's more procedural provisions . . . also apply in state courts.") (citations omitted). Instead, state courts tend to apply state procedural rules, which may allow for appeal from orders compelling arbitration. *See, e.g.*, Rizzio v. Surpass Sr. Living LLC, 492 P.3d 1031, 1035 (Ariz. 2021) ("We have jurisdiction pursuant to article 6, section 5(3) of the Arizona Constitution."); *see also* We. Bagel Co. v. Superior Ct. of Los Angeles County, 66 Cal. App. 5th 649, 659-60 (Cal. Ct. App. 2021) ("Code of Civil Procedure section 1294, subdivision (a) provides: "An aggrieved party may appeal from: [¶] (a) An order dismissing or denying a petition to compel arbitration.").

iii. Location of Court

Federal district courts in some states decided a higher number of motions to compel arbitration as compared to their share of federal private civil cases nationwide[158] and relative to their population.[159] For instance, the federal district courts in California decided the highest percentage of motions to compel arbitration submitted to these courts—21.6% (granting in whole or in part 76.3% of them).[160] Yet the California federal district courts decided only 11% of all private civil cases in federal district courts nationwide.[161]

In contrast, federal district courts in other states decided a lower percentage of motions to compel arbitration as compared with their share of federal private civil cases nationwide. For instance, federal district courts in Florida decided only 7.0% of motions to compel arbitration submitted to these courts (granting in whole or in part 77.2% of them).[162] Yet the Florida federal district courts decided 23.6% of all private civil cases in the federal district courts nationwide.[163]

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[158] *See* Table C-1., U.S. District Courts – Civil Cases Commenced, Terminated, and Pending During the 12-Month Period Ending June 30, 2022, U.S. DIST. COURTS, https://www.uscourts.gov/file/45420/download [https://perma.cc/ZF3B-VHV5] (last visited Nov. 8, 2024). This comparison is an imperfect comparison because many cases in federal district court are terminated with no action by the court, and the vast majority terminate before trial. Table C-4., Civil Cases Terminated, by Nature of Suit and Action Taken, During the 12-Month Period Ending June 30, 2022, U.S. DIST. COURTS, https://www.uscourts.gov/file/45434/download [https://perma.cc/Y6YP-J2H9]. Nevertheless, this comparison provides a rough estimate of the proportion of FAA cases relative to all private civil actions on the dockets of the federal district courts.

[159] As of 2020. *2020 Population and Housing State Data*, U.S. CENSUS BUREAU (Aug. 12, 2021), https://www.census.gov/library/visualizations/interactive/2020-population-and-housing-state-data.html [https://perma.cc/8K88-2ZB9].

[160] *See infra* Table 4A.

[161] California's population constituted 12% of the total population of the United States as of 2020. *2020 Population and Housing State Data*, U.S. CENSUS BUREAU (Aug. 12, 2021), https://www.census.gov/library/visualizations/interactive/2020-population-and-housing-state-data.html [https://perma.cc/8K88-2ZB9].

[162] *See infra* Table 4A.

[163] Florida's population constituted 6.5% of the total population of the United States as of 2020. *Id.* We note that the district court for the Northern District of Florida saw a surge in civil cases *filed* in the year ending March 31, 2021. *Federal Judicial Caseload Statistics 2021*, U.S. COURTS, https://www.uscourts.gov/statistics-reports/federal-judicial-caseload-statistics-2021 [https://perma.cc/P3CB-HSS7] (last accessed Oct. 8, 2024). This was a result of the transfer of the 3M combat arms earplug multidistrict

Federal district courts in some states decided a share of motions to compel arbitration that was comparable to their share of federal private civil cases nationwide. For instance, federal district courts in Texas decided 7.3% of the motions to compel arbitration submitted to these courts (granting in whole or in part 75% of them) and 9% of all private civil cases in the federal district courts nationwide.[164] Similarly, the federal district courts in New York decided 9.1% of motions to compel arbitration submitted to these courts (granting in whole or in part 79.7% of them) and 7% of all private civil cases in the federal district courts nationwide.[165] *Table 4A* contains the complete breakdown of motions to compel arbitration in the federal district courts.[166]

Among the federal circuit courts of appeals, only the Fifth, Sixth, and Ninth Circuits decided 10 or more appeals from motions to compel arbitration.[167] The Fifth and Sixth Circuits decided 10 appeals each, compelling and denying these appeals at an equal rate.[168] The Ninth Circuit decided twenty-eight appeals, compelling arbitration at a rate of 53.6%.[169] *Table 4B* provides a complete breakdown of motions to compel arbitration in the federal circuit courts of appeals.[170]

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litigation to that court. *See* in re 3M Combat Arms Earplug Prods. Liab. Litig., 366 F. Supp. 3d 1368, 1369 (U.S. Jud. Pan. Mult. Litig. 2019). However, this transfer did not affect the total filings in federal district courts in the year ending March 31, 2022, which declined by 33%. *Federal Judicial Caseload Statistics 2022*, U.S. COURTS, https://www.uscourts.gov/statistics-reports/federal-judicial-caseload-statistics-2022 [HTTPS://PERMA.CC/2NRF-5VE3] (last accessed Oct. 8, 2024). In any event, we are comparing federal courts' share of motions to compel arbitration *decided* between June 1, 2021, and May 31, 2022, to their share of civil cases *terminated* during that time period. Therefore, the filing of the 3M multidistrict litigation does not affect our analysis.

164 *See infra* Table 4A. Texas' population constituted 9% of the total population of the United States as of 2020. *2020 Population and Housing State Data*, *supra* note 161.

165 *See infra* Table 4A. As of 2020, the population of New York is 6% of the total population of the United States. *2020 Population and Housing State Data*, *supra* note 161.

166 *See infra* Table 4A.

167 *See infra* Table 4B.

168 *See infra* Table 4B.

169 *See infra* Table 4B.

170 *See infra* Table 4B.

State courts in some states decided a higher number of motions to compel arbitration as compared with their share of civil cases decided in state courts nationwide.[171] For instance, in our sample, state courts in California, at all levels, decided the highest number of motions to compel arbitration submitted to state courts—63.4% (compelling arbitration in whole or in part in 70.1% of them).[172] Yet the California state courts decided only 10% of all civil cases decided in state courts nationwide.[173] We also note that removing the California state courts from our sample, with its high compel rate, left the remaining states with a 54.3% compel rate overall (instead of 70.1%).[174]

In contrast, other state courts decided a lower number of motions to compel arbitration as compared with their share of civil cases decided nationwide.[175] For instance, state courts in Texas, at all levels, decided 8.5% of all motions to compel arbitration submitted to state courts (compelling arbitration in whole or in part in 56.5% of them) and 18% of all civil cases decided in state courts nationwide.[176] *Table 4C* provides a complete breakdown of motions to compel arbitration in the state courts.[177]

iv. Conclusion—Type, Level and Location of Court

Overall, our data reveals a small gap between the compel rate of state and federal courts, but the contrast is not striking. Both state and federal trial courts compelled arbitration at a high rate while both state and federal appellate courts compelled arbitration in approximately 50% of appeals before them. Moreover, most of the successful appeals before these courts resulted in a reversal of a denial of a motion to compel arbitration (that is, they resulted in compelling arbitration).

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171 *CSP STAT Civil*, CTS. STAT. PROJECT, https://www.courtstatistics.org/court-statistics/interactive-caseload-data-displays/csp-stat-nav-cards-first-row/csp-stat-civil [https://perma.cc/F6Y7-J2QB] (last visited Oct. 9, 2023) (discussing the comparison made to "dispositions" of civil cases in state courts during 2021 based on data provided by 21 states).

172 *See infra* Table 4C.

173 *CSP STAT Civil*, *supra* note 171.

174 *See infra* Table 4C.

175 *See infra* Table 4C.

176 *See infra* Table 4C.

177 *See infra* Table 4C.

In terms of court location, California federal and state courts as well as the Ninth Circuit decided the largest number of motions to compel arbitration and appeals from such motions included in our dataset. Federal district courts in some states decided a disproportionately large (California) or small (Florida) number of motions to compel arbitration as compared with their share of federal civil cases decided nationwide while other courts' share of motions to compel was comparable with their share of civil cases decided nationwide (Texas, New York). We found a similar trend among the state courts with some deciding a disproportionately large (California) or small (Texas) number of motions to compel arbitration as compared with their share of state civil cases decided nationwide.

4. Political Association of the Judge(s)

Overall, Democratic judges and all-Democratic panels compelled arbitration, in whole or in part, in 74.4% of their cases.[178] Majority-Democratic panels compelled arbitration, in whole or in part, in 41.9% of their cases.[179] Republican judges and all-Republican panels compelled arbitration, in whole or in part in 77.8% of their cases.[180] Majority-Republican panels compelled arbitration in whole or in part, in 47.1% of their cases.[181]

In the federal district courts, Democratic judges compelled arbitration, in whole or in part, in 77.6% of their cases.[182] Republican judges compelled arbitration in whole or in part in 81.0% of their cases.[183]

In the federal circuit courts of appeals, all-Democratic panels compelled arbitration in four out of the ten appeals before them.[184] Majority-Democratic panels compelled arbitration in 38.1% of appeals before them.[185] All-Republican panels compelled

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[178] *See infra* Table 5A.

[179] *See infra* Table 5A.

[180] *See infra* Table 5A.

[181] *See infra* Table 5A. This Table has a total of 1,448 cases because the identity of two judges could not be confirmed.

[182] *See infra* Table 5B.

[183] *See infra* Table 5B.

[184] *See infra* Table 5C.

[185] *See infra* Table 5C.

arbitration in 65.2% of appeals before them. Majority-Republican panels compelled arbitration in 51.5% of appeals before them.[186]

In the state trial courts, Democratic judges compelled arbitration, in whole or in part, in 83.3% of their cases.[187] Republican judges compelled arbitration, in whole or in part, in 75.0% of their cases.[188] In state appellate courts (intermediary and supreme), all-Democratic panels compelled arbitration, in whole or in part, in 41.2% of appeals before them.[189] Majority-Democratic panels compelled arbitration, in whole or in part, in 43.1% of appeals before them.[190] All-Republican panels compelled arbitration, in whole or in part, in 61.1% of appeals before them.[191] Majority-Republican panels compelled arbitration, in whole or in part, in 42.9% of appeals before them.[192]

i. Conclusion—Judges' Political Association

Overall, these results seem to indicate that single judges and single-party panels, both Democratic and Republican, compelled arbitration far more often than majority-Democratic and majority-Republican panels. However, when state and federal appellate courts are examined separately, the difference between single-party panels and majority panels blurs. All-Democratic and majority-Democratic panels compelled arbitration at approximately the same rate while all-Republican panels compelled at a higher rate than majority-Republican panels. This phenomenon suggests that minority Democratic judges on majority-Republican panels influence the outcome of the cases. That being said, we note the relatively small number of observations for each category of political association, particularly on the federal circuit courts.

In the federal district courts, the difference between the compel rates of Democratic and Republican judges was minor, indicating that the political association of federal district judges is

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[186] *See infra* Table 5C.
[187] *See infra* Table 5D.
[188] *See infra* Table 5D.
[189] *See infra* Table 5E.
[190] *See infra* Table 5E.
[191] *See infra* Table 5E.
[192] *See infra* Table 5E.

irrelevant. In the state trial courts, however, Democratic judges compelled arbitration at a higher rate than Republican judges.

B. *Stage Two: Logistic Regressions*

In order to simplify the analysis, we collapsed the outcome categories "compelled" and "compelled in part" into one category of "compelled in whole or in part." Collapsing the outcome into one category allows for the outcome variable to be either "compelled in whole or in part" or "denied," making it easier to interpret the results.[193] Given that this dependent variable and for that matter all of the independent variables, are categorical in nature, we conducted multinomial logistic regressions. Logistic regressions answer the following question: what is the impact of the presence or absence of certain independent variables on the probability of observing the outcome being of a particular category? So, in our specific set of regressions, the question being asked in these logistic regressions is, what impact do our specific internal and external variables have on the odds or probability of observing a court compel (or deny) arbitration in response to the motion being brought? To answer this question, we ran a series of logistic regressions and built up a model that provided some insights into the question.

We first ran a set of regressions of the outcome variable on the court type, the type of dispute, and political association of the judges separately.[194] However, we felt that a useful approach would be to build up the various models from which we ultimately derive our conclusions. The results of these three regressions—court type, type of dispute, and political association of the judges—can be seen in *Tables R1-R3* below.[195]

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[193] We note that our results do not change qualitatively if we run the regressions with three outcomes.

[194] As explained above, our approach in the regression analysis is to think of the result of each regression as a conditional expectation of the dependent variable - the outcome of the motion to compel arbitration in this case - on whichever variables we use in the regression as independent variables. We recognize that there are several sources of error in this approach, most notably omitted variable bias. *See e.g.*, Lung-Fei Lee, *Specification Error in Multinomial Logit Models: Analysis of the Omitted Variable Bias*, 20 J. ECONOMETRICS 197 (1982).

[195] *See infra* Tables R1-R3.

Table R1 has as its dependent variable the outcome of the motion to compel being either compel (in whole or in part) or deny.[196] The coefficients reported are relative risk ratios (RRR),[197] which tell us whether the presence or absence of an independent variable is more or less likely to generate a decision to compel arbitration. The constant is a state highest appellate court. The coefficients of federal district courts as well as of state trial courts are statistically significant.[198] This result as well as the values of their coefficients indicates that these courts overwhelmingly compel arbitration with the federal district courts compelling at a slightly higher rate than their state counterparts. This outcome confirms the results of our frequencies analysis above, which found that state and federal trial courts compel arbitration at a similar rate.[199]

Table R2 shows that international and employment disputes were statistically significant in terms of their impact on the outcome of motions to compel arbitration.[200] In other words, if the dispute was an employment or international dispute, the court was more likely to compel arbitration. However, the likelihood of compelling arbitration in international disputes was more than three times higher than in employment disputes.[201]

Table R3 shows that majority-Democratic panels and majority-Republican panels were denying motions to compel arbitration in a statistically significant manner.[202] The compel or deny rate of all other judges and panels was not statistically significant.[203] This result indicates that mixed panels generate outcomes substantially different from panels comprised of all-Democratic or all-Republican judges.

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[196] For the rest of this section, we will refer to the outcome as 'compel' when we mean compelled in whole or in part.

[197] An RRR=1 indicates that the event is equally likely relative to the base outcome, here denying the motion to compel arbitration. An RRR>1 indicates that the presence of the independent variable is more likely to generate the outcome, here, granting the motion to compel. An RRR<1 indicates that the independent variable is more likely to generate the base outcome, *i.e.*, deny the motion to compel arbitration.

[198] *See infra* Table R1.

[199] *See infra* Table 3A.

[200] *See infra* Table R2.

[201] *See infra* Table R2.

[202] *See infra* Table R3.

[203] *See infra* Table R3.

We then conducted a regression with all three of these variables—court type, type of dispute, and political association of the judges—as the independent variables. The results can be seen in *Table R4* below.[204] The results show that state and federal trial courts as well as international and employment disputes continue to stand out in a positive manner.[205] But now, the political association results have changed with no type of judge or panel being statistically significantly linked to compelling or denying arbitration.[206]

Therefore, we see that the results of *Table R3* do not hold when we account for the type and level of court as the political association of the judges loses its significance.[207] This result may be because the high compel rate by trial court judges of both political parties, as seen in *Table R1*, may be creating a false benchmark against which mixed panels of appellate courts are being compared.

We ran a few more regressions using an interactive approach. The outcome of the motion to compel arbitration was the dependent variable, and we used two independent variables. In *Table R5*, the first independent variable was an interactive variable of court type with the political association of the judges, and the second independent variable was the type of dispute.[208] The results provide a more granular look at the interaction between court type and political association of the judges.

All three types of judges on the state and federal trial courts—Democratic, Republican, and N/A (magistrates and bankruptcy judges)—compelled arbitration with similar likelihood in a statistically significant manner.[209] One distinction, however, is that in the federal district courts, Democratic judges were slightly less likely to compel arbitration than Republican judges while the result in the state trial courts was reversed.[210] On the state highest appellate courts, all-Republican panels were far more likely to compel arbitration than all other judges and panels on all other

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[204] *See infra* Table R4.
[205] *See infra* Table R4.
[206] *See infra* Table R4.
[207] *See infra* Table R4.
[208] *See infra* Table R5.
[209] *See infra* Table R5.
[210] *See infra* Table R5.

courts.[211] International and employment disputes continue to stand out in a positive manner.[212]

The final step in the analysis is to add four more variables into the regression, namely the arguments that parties raised in opposition to motions to compel arbitration. These arguments are: 1) that the arbitration agreement does not exist or was not properly formed, 2) that the claims fall outside of the scope of the arbitration agreement, 3) that that the party seeking arbitration has waived its right to do so, and 4) that the arbitration agreement is unconscionable. The assumption is that if parties have legitimate concerns about any of these issues, the courts will deny the motion to compel arbitration.

In *Table R6* below, we conduct the logistic regression with the variables we have used so far in addition to the four arguments as independent variables.[213] *Table R6* shows that the results we reported above regarding court type, political association of judges, and type of dispute have changed.[214] The constant in this equation is a state highest appellate court with an N/A panel (no political association) adjudicating a labor dispute where none of the four arguments are presented.

Two of the four arguments—scope and unconscionability—show considerable positive impact on the probability of arbitration being compelled in a statistically significant manner.[215] Moreover, unconscionability arguments were more than twice as likely to lead to compelling arbitration than scope arguments.[216] What this regression reveals is that when controlling for the level of court, political association of the judges, type of dispute, and arguments raised in opposition, neither unconscionability nor scope were powerful arguments in convincing courts to deny arbitration.

The combination of the political association of the judges and the type/level of court retained the significance of all-Republican panels on states' highest appellate courts, which continued to compel arbitration in a statistically significant manner and at a

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[211] *See infra* Table R5.
[212] *See infra* Table R5.
[213] *See infra* Table R6.
[214] *See infra* Table R6.
[215] *See infra* Table R6.
[216] *See infra* Table R6.

much higher rate than all other courts and political associations.[217] In addition, Democratic judges on state trial courts and Republican judges on federal district courts compelled arbitration in a statistically significant manner.[218]

In terms of type of dispute, the results have now changed. All types of disputes have become statistically significantly linked to compelling arbitration although in varied degrees. International disputes were most likely to be compelled to arbitration while labor disputes were least likely. Employment disputes were slightly more likely to be compelled to arbitration than consumer and business disputes while the latter two were compelled at a similar rate.

These results create a base model from which we can then test other hypotheses. For example, some authors have argued that California state courts are more likely to reject arbitration agreements using tools such as unconscionability.[219] To test this suggestion, we interacted the California variable with the type of court as an independent variable in addition to all the other variables. The results are in *Table R7* below.[220] The constant in this equation is a state highest appellate court outside California with an N/A panel adjudicating a labor dispute where none of the four arguments are presented. What these results reveal is that the California appellate courts denied arbitration at a higher rate than any other courts inside or outside California.[221] The variables type

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[217] *See infra* Table R6. We note, however, that we did not have any cases from states' highest appellate courts with all-Democratic judges.

[218] The fact that there is some statistically significant variation among the federal district court judges suggests that, regardless of whether they are nominated by the President or in some other way (by the Senator or a commission), the party of the President who formally nominates the judge is a relevant proxy of the judge's political association. *See infra* Table R6; *see also* text accompanying *supra* note 67.

[219] *See* Charles L. Knapp, *Blowing the Whistle on Mandatory Arbitration Unconscionability as a Signaling Device*, 46 SAN DIEGO L. REV. 609, 623 (2009) (finding that unconscionability claims are more likely to succeed in the state of California as well as in the federal courts in California); *see also* Stephen A. Broome, *An Unconscionable Application of the Unconscionability Doctrine: How the California Courts Are Circumventing the Federal Arbitration Act*, 3 HASTINGS BUS. L.J. 39, 48 (2006) (examining California state court decisions considering unconscionability in the arbitration and non-arbitration contexts and concluding that "unconscionability challenges succeed with far greater frequency when the contractual provision at issue is an arbitration agreement.").

[220] *See infra* Table R7.

[221] *See infra* Table R7.

of dispute and arguments remain the same as above in terms of their impact on motions to compel arbitration and their statistical significance.[222]

These results confirm our frequencies results reported above, which showed a high rate of compelling arbitration among the California trial courts. While our data has more state court decisions from California than from other states, the data suggests that, contrary to conventional wisdom, California state trial judges are not hostile to arbitration. However, intermediary appellate court judges in California seem to compel arbitration at a lower rate than all other courts.

IV. IMPLICATIONS FOR THE FAA DEBATE

Our study indicates that, overall, the majority of contested motions to compel arbitration under the FAA are granted. Nevertheless, this outcome is far from guaranteed as the courts deny about a third of such motions. This conclusion supports our view of the lower courts as gatekeepers of the FAA; notwithstanding the "pro-arbitration" regime created by the FAA and reinforced by the Supreme Court, lower courts retain considerable discretion to refuse to enforce arbitration agreements in certain legal and factual circumstances. In this Part, we synthesize the results of our empirical analysis to flesh out what those circumstances might be.

A. *Type and Level of Court*

Our data suggests that a higher number of motions to compel arbitration under the FAA are decided in federal than in state courts. As noted above, this result may be a function of the lower number of state courts included in our dataset. Having said that, federal courts likely decide a significant number of motions to compel arbitration under the FAA whether or not this number is lower or higher than state courts. Many FAA-related cases, which must pertain to contracts involving interstate commerce,[223] arise

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[222] *See infra* Table R7. We also tested in this regression the interactive variable of level/type of court-political association. We do not report these results, because the outcome remains similar.

[223] 9 U.S.C. § 1.

between diverse parties. Many also involve disputes in which federal statutory claims are raised (particularly in the employment context) providing federal question jurisdiction.[224] Moreover, the Supreme Court has allowed federal courts to "look through" a motion to compel arbitration under § 4 of the FAA for the purpose of ascertaining subject-matter jurisdiction.[225] Indeed, parties seeking to enforce arbitration agreements routinely remove motions to compel arbitration under the FAA from state to federal courts.[226]

There are several reasons why some litigants (namely those seeking to enforce arbitration agreements) may prefer federal courts over state courts to decide motions to compel arbitration. First, there is the view (justified or not) that federal courts are "qualitatively . . . superior" to at least some state courts.[227] Second, parties seeking to enforce arbitration agreements may fear that state courts will refuse to adhere to the federal "policy favoring arbitration" that the FAA embodies and therefore be more inclined to refuse motions to compel arbitration than federal courts.[228] Whether state courts are even bound to apply the procedural provisions of the FAA, including those that require courts to stay litigation and compel arbitration, also remains unclear.[229] While the Supreme Court has explicitly held that the FAA's "substantive" provisions, in Sections 1-2, are applicable in state courts, the Court has "never held that [Sections] 3 and 4, which by their terms appear to apply only to proceedings in federal court, are nonetheless applicable in state court."[230] Therefore, instead of applying

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[224] Hall St. Assocs., L.L.C. v. Mattel, Inc., 552 U.S. 576, 582 (2008) (The FAA does not itself create federal subject-matter jurisdiction. Rather, a federal court must have an "independent jurisdictional basis" to hear a motion to compel arbitration).

[225] Vaden v. Discover Bank, 556 U.S. 49, 62 (2009); *but see* Badgerow v. Walters, 596 U.S. 1, 15 (2022) (finding that the Court has held that the federal courts may not "look through" motions to confirm or vacate arbitration awards under § 9 and § 10 of the FAA to find subject-matter jurisdiction).

[226] 9 U.S.C. § 2.

[227] CHARLES A. WRIGHT & ARTHUR R. MILLER, FEDERAL PRACTICE AND PROCEDURE § 3601 (3rd ed. June 2024 Update).

[228] Southland Corp. v. Keating, 465 U.S. 1, 10 (1984).

[229] 9 U.S.C. §§ 3-4.

[230] Volt Info. Sci., Inc. v. Bd. of Trs. of Leland Stanford Junior Univ., 489 U.S. 468, 477 (1989) (citations omitted)*; see also Vaden,* 556 U.S., at 71 n.20 ("This Court has not decided whether §§ 3 and 4 apply to proceedings in state courts, and we do not do so

procedural provisions of the FAA such as Sections 3 and 4, state courts could apply procedures set out under state laws, which could be less favorable to arbitration.[231]

However, our data suggests that distrust of state courts' treatment of FAA arbitration may be unjustified as state trial courts generally granted motions to compel arbitration at a similar rate to federal district courts.[232] Moreover, success rates at the state and federal appellate levels were also comparable.[233] While these rates are lower than those at the state and federal trial court levels,[234] in the vast majority of the successful appeals from motions to compel arbitration, the appellate courts reversed trial courts' *denial* of arbitration. Therefore, to the extent that parties attempt to forum-shop between state and federal courts, our results indicate these attempts may be unnecessary.

While removing the California state courts from the analysis lowered the overall compel rate of the remaining states, one should note that the number of cases from states other than California included in the dataset was low. Therefore, there seems to be a "California effect" in our dataset in terms of the overall state courts'

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here.")*; but see Badgerow*, 596 U.S., at 8 n.2 (recognizing that the Court has "never decided whether the FAA's more procedural provisions . . . also apply in state courts" but noting that the Court has nonetheless "made clear that Section 2 'carries with it' a duty for States to provide certain enforcement mechanisms equivalent to the FAA's.").

[231] In some cases, however, state arbitration laws may be *more* favorable to arbitration than the FAA. For instance, arbitration laws of some states do not exempt employees from arbitration while the FAA provides such an exemption for certain employees. 9 U.S.C. § 1 ("[N]othing herein contained shall apply to contracts of employment of seamen, railroad employees, or any other class of workers engaged in foreign or interstate commerce.")*; see also, e.g.*, Saxon v. Sw. Airlines Co., No. 19-cv-00403, 2023 WL 2456382 (N.D. Ill. Mar. 10, 2023).

[232] *See infra* Table 3A.

[233] *See infra* Table 3A.

[234] This result is in line with existing scholarship on the probability of winning in appellate courts. *See generally* George L. Priest & Benjamin Klein, *The Selection of Disputes for Litigation*, 13 J. LEGAL STUD. 1 (1984) (discussing that, under certain conditions, given the payoffs to both sides of a dispute, as well as the expected probability of winning, disputes brought in litigation should converge to a 50-50-win rate for plaintiffs. This hypothesis has generated hundreds of articles testing and disputing the original hypothesis)*; see also* Alexandra D. Lahav & Peter Siegelman, *The Curious Incident of the Falling Win Rate: Individual vs System-Level Justification and the Rule of Law*, 52 U.C. DAVIS L. REV. 1371 (2019). While we do not posit any view on the Priest-Klein model, we suggest that our results can be added to the mix of results interpreting the model.

compel rate. This effect may be a result of the attitude of California trial judges toward arbitration or of California contract law, which governs the enforcement of arbitration agreements in California.[235] However, given that California is generally perceived as a pro-consumer and pro-employee jurisdiction and therefore, in some ways, as a jurisdiction that might be less sympathetic to arbitration in these contexts, we expect that state courts in most other states would compel arbitration at a rate comparable to or higher than the compel rate in California state courts. Therefore, we assume that this result is a function of the low number of state court decisions from other states in our dataset, rather than a true 'California effect' that meaningfully impacts the compel rate among state courts nationwide.

B. *Location of the Court*

Federal district courts in certain states (California) decided a higher number of motions to compel arbitration as compared with their share of civil cases decided in federal district court courts nationwide. One way to interpret this result is that parties in these states challenged arbitration agreements more often than they litigated other civil disputes in federal courts. This interpretation, in turn, may suggest that parties (or lawyers) in states such as California are more averse to arbitration. In contrast, federal district courts located in Florida decided a lower number of motions to compel arbitration as compared with their share of civil cases in federal district courts nationwide. Therefore, one may say that parties in Florida challenged arbitration agreements less often than they litigated other civil disputes in federal courts and may thus be less averse to arbitration.

Among the federal circuit courts of appeals, the Ninth Circuit, which has been the circuit court of appeals most frequently

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[235] While the FAA requires the enforcement of valid arbitration agreements in both state and federal courts, the grounds on which courts may refuse to enforce arbitration agreements are those of state law generally applicable to contracts. *See* Arthur Andersen LLP v. Carlisle, 556 U.S. 624, 630-631 (2009) (holding that state law "is applicable to determine which contracts are binding under § 2 and enforceable under § 3 '*if* that law arose to govern issues concerning the validity, revocability, and enforceability of contracts generally.'") (emphasis omitted).

overturned by the Supreme Court in FAA cases,[236] compelled arbitration (slightly) more frequently than denying it. The Ninth Circuit also decided the highest number of appeals from motions to compel arbitration in our dataset. Given that California is the largest state in the Ninth Circuit and that its federal courts decided the highest number of motions to compel arbitration submitted to those courts, most of the appeals from such motions to the Ninth Circuit plausibly originated in California. This assumption further supports the proposition that parties in California might be more averse to arbitration.

As for the state courts, California state courts decided a higher number of motions to compel arbitration as compared with their share of civil cases decided in state courts nationwide. This result is further support of a general aversion to arbitration among parties in California. At the same time, the California state courts (much like the federal district courts in California) granted the majority of motions to compel arbitration before them. These results contrast with opposite conclusions of other studies concerning arbitration in the California courts.[237] Courts in other states—Florida—decided a lower number of motions to compel arbitration as compared with their share of civil cases decided in state courts nationwide. This result further supports the suggestion that parties in Florida might be relatively pro-arbitration.

C. *Type of Dispute*

We were not surprised that employment and consumer disputes were the most common types of disputes underlying contested motions to compel arbitration as much of the backlash against FAA arbitration has been in the context of adhesive employment and consumer contracts.[238] However, the frequency of

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[236] *See generally* Dean Witter Reynolds, Inc. v. Byrd, 470 U.S. 213 (1985); *see also* Cir. City Stores, Inc. v. Adams, 532 U.S. 105 (2001); Hall St. Assocs., L.L.C., 552 U.S. 576 (2007); Rent-A-Center, W., Inc. v. Jackson, 561 U.S. 63 (2015); AT&T Mobility LLC v. Concepcion, 563 U.S. 333 (2011); CompuCredit Corp. v. Greenwood, 565 U.S. 95 (2012); Lamps Plus, Inc. v. Varela, 587 U.S. 176 (2019).

[237] *See, e.g.*, Broome, *supra* note 219, at 41 (concluding that "California courts are clearly biased against arbitration as an alternative means of dispute settlement.").

[238] *See, e.g.*, Stephen J. Ware, *A Short Defense of* Southland*,* Casarotto*, and other Long-Controversial Arbitration Decisions*, 30 LOY. CONSUMER L. REV. 303, 303-4, 307 (2018) (referring to some of the main critiques of arbitration in the employment context);

these types of disputes did not necessarily correspond with their compel rates.

While all types of disputes were related to the outcome of compelling arbitration in a positive and statistically significant manner, the rate at which each type of dispute was compelled differed. International disputes were far more likely to be compelled than the other types of disputes, followed (distant second) by employment, and then closely by business and consumer disputes. The fact that international disputes are most frequently compelled to arbitration is not surprising given that the Supreme Court has long espoused a particularly strong pro-arbitration policy in international arbitration disputes.[239]

The fact that employment disputes were the second most compelled type of dispute could indicate that parties raise less meritorious challenges to arbitration agreements in this context, that courts are not particularly bothered by the enforcement of adhesive employment arbitration agreements, or both. Indeed, our frequencies analysis revealed that unconscionability arguments, which tend to fail, were most frequently raised in employment disputes.

Finally, the fact that consumer disputes were compelled at a lower rate may suggest that parties raise more meritorious claims in this context (such as existence/formation), that courts are more

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see also David E. Feller, *Putting* Gilmer *Where It Belongs: The FAA's Labor Exemption*, 18 HOFSTRA LAB. & EMP. L.J. 253, 253-54 nn.4-8 (2000) (arguing that employment arbitration is "undesirable and unfair"); Cynthia Estlund, *The Black Hole of Mandatory Arbitration*, 96 N.C. L. REV. 679, 681-82, 686 (2018) (criticizing the secrecy and non-transparency of arbitration); Jean R. Sternlight, *Mandatory Arbitration Stymies Progress Towards Justice in Employment Law: Where to, #MeToo?* 54 HARV. C.R.-C.L. L. REV. 155, 157 (2019) ("By denying their employees access to court, companies are causing employment law to stultify."); Imre S. Szalai, *The Failure of Legal Ethics to Address the Abuses of Forced Arbitration*, 24 HARV. NEGOT. L. REV. 127, 161 (2018) ("[A]rbitration today is often forced upon consumers and employees without their meaningful consent."); F. Paul Bland et al., *From the Frontlines of the Modern Movement to End Forced Arbitration and Restore Jury Rights*, 95 CHI.-KENT L. REV. 585, 586 (2020) ("[G]iven the certainty that consumers and employees will almost never be able to arbitrate small dollar claims individually, forced arbitration provisions promise corporate parties virtual immunity from liability.").

[239] *See generally, e.g.*, Scherk v. Alberto-Culver Co., 417 U.S. 506 (1974) (holding that international securities claims are arbitrable); *see also* Mitsubishi Motors Corp. v. Soler Chrysler-Plymouth, Inc., 473 U.S. 614 (1985) (holding that international antitrust claims are arbitrable).

bothered by adhesive arbitration agreements in this context, or both.

We expected business disputes to be compelled at a higher rate than both consumer and employment disputes, considering that arbitration agreements in the business context do not tend to be controversial. Yet their compel rate was lower than employment disputes and very similar to consumer disputes. This result, again, could indicate that parties raise more meritorious arguments in this context, which tends to involve negotiated commercial contracts.

D. *Arguments*

We were not surprised that the most common arguments raised by parties to challenge an arbitration agreement related to its existence/formation as these challenges cannot be delegated to the arbitrator and must be determined by the courts.[240] The fact that existence/formation arguments were most successful in consumer disputes suggests that there may be genuine issues concerning the way in which parties enter into arbitration agreements in the consumer context. For instance, a court may find lack of assent to an adhesive web-based consumer contract.[241]

In contrast, the relatively high success rate of existence/formation arguments in business disputes is unlikely to result from formation issues such as lack of assent as business contracts are typically negotiated. Instead, existence/formation arguments in this context tend to concern non-signatory arguments, meaning that a party to the litigation was arguably not a party to the arbitration agreement and therefore cannot compel or be compelled to arbitrate.

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[240] Henry Schein, Inc. v. Archer and White Sales, Inc., 586 U.S. 63, 69 (2019) ("before referring a dispute to an arbitrator, the court determines whether a valid arbitration agreement exists. But if a valid agreement exists, and if the agreement delegates the arbitrability issue to an arbitrator, a court may not decide the arbitrability issue.").

[241] *See generally, e.g.,* Berman v. Freedom Fin. Network, LLC, 30 F.4th 849 (9th Cir. 2022); *see also* Wollen v. Gulf Stream Restoration and Cleaning, LLC, 259 A.3d 867 (N.J. Super. Ct. App. Div. 2021); Gaudreau v. My Pillow, Inc., No. 6:21-cv-1899-CEM-DAB, 2022 WL 3098950 (M.D. Fla. July 1, 2022); Goldstein v. Fandango Media, LLC, No. 9:21-cv-80466-RAR, 2021 WL 6617447 (S.D. Fla. July 27, 2021); Burzdak v. Universal Screen Arts, Inc., No. 21-cv-02148, 2021 WL 3621830 (N.D. Cal. Aug. 16, 2021).

The second most common challenge to arbitration agreements was to their scope. We were surprised that parties raised this argument so often given that the Supreme Court has repeatedly instructed lower courts to decide doubts concerning the scope of arbitration agreements in favor of arbitration,[242] and courts are required to refer scope challenges to the arbitrator in the presence of a valid delegation clause. Indeed, the vast majority of scope challenges were rejected (or delegated) by the courts. Scope arguments were also related to the outcome of compelling arbitration in a positive and statistically significant way, meaning that raising scope arguments is unlikely to lead to a denial of a motion to compel arbitration.

That scope arguments were most successful in labor disputes might be explained by the fact that courts frequently denied enforcement of arbitration clauses contained in collective bargaining agreements where such clauses did not "clearly and unmistakably" waive the right of an employee to litigate statutory claims and where such claims were raised in the action. In other words, courts frequently found that statutory claims fell outside the scope of arbitration clauses contained in collective bargaining agreements.[243]

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[242] *See* Moses H. Cone Memorial Hosp. v. Mercury Constr. Corp., 460 U.S. 1, 24-25 (1983) ("The Arbitration Act establishes that, as a matter of federal law, any doubts concerning the scope of arbitrable issues should be resolved in favor of arbitration."); *see also* Dean Witter Reynolds, Inc. v. Byrd, 470 U.S. 213, 221 (1985); *Mitsubishi Motors*, 473 U.S., at 626; Lamps Plus, Inc. v. Varela, 587 U.S. 176 (2019).

[243] *See generally, e.g.*, Rattler-Bryceland v. Boutchantharaj Corp., No. CIV-22-0106-R, 2022 WL 19403830 (W.D. Okl. May 5, 2022); *see also* Infantino v. Sealand Contractors Corp., 565 F.Supp.3d 347 (W.D.N.Y. 2021); Woodburn v. City of Henderson, No. 2:19-cv-01488-JAD-VCF, 2021 WL 5605177 (D. Nev. Nov. 29, 2021); Kuenzinger v. Drs. Med. Ctr. Modesto, Inc., F082272, 2021 WL 6064094 (Cal. Ct. App. Dec. 22, 2021); Amalgld Transit Union v. New Orleans Reg'l Transit Auth., 600 F.Supp.3d 656 (E.D. La. 2022). The requirement for a "clear and unmistakable" waiver of a judicial forum for statutory claims arising under collective bargaining agreements comes from the Supreme Court's decision in 14 Penn Plaza LLC v. Pyett, 556 U.S. 247, 255 (2009). For commentary on this and related decisions of the Supreme Court, *see generally* Barry Winograd, *A New Day Dawning or Dark Clouds on the Horizon? The Potential Impact of the* Pyett *Case*, 59 Lab. L.J. 227 (2008).

The third most common challenge to arbitration agreements was unconscionability.[244] This is notwithstanding the Supreme Court's 2011 decision in *Concepcion*, which some commentators have argued left "very little room for the *actual* application of the [unconscionability] doctrine."[245] Our data suggests that *Concepcion* has not meaningfully impacted whether the parties resort to unconscionability arguments.[246] We were not surprised that unconscionability was raised most frequently in the employment context where adhesion contracts are ubiquitous. We expected the same with consumer disputes, which also frequently involve adhesion contracts, but unconscionability was raised less frequently in that context.

Our data also reveals an astounding lack of success of unconscionability arguments in leading to the denial of motions to compel arbitration, failing more frequently than scope arguments. Unconscionability arguments were successful only in

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[244] Commentators have long debated the relationship between FAA arbitration and the unconscionability doctrine. *See generally, e.g.*, Stephen Friedman, *Arbitration Provisions: Little Darlings and Little Monsters*, 79 FORDHAM L. REV. 2035 (2011); *see also* Jerett Yan, *A Lunatic's Guide to Suing For $30: Class Action Arbitration, The Federal Arbitration Act and Unconscionability After* AT&T v. Concepcion, 32 BERKELEY J. EMP. & LAB. L. 551 (2011); Andrea Doneff, *Is* Green Tree v. Randolph *Still Good Law? How the Supreme Court's Emphasis on Contract Language in Arbitration Clauses Will Impact the Use of Public Policy to Allow Parties to Vindicate Their Rights*, 39 OHIO N.U. L. REV. 63 (2012); Susan Randall, *Judicial Attitudes toward Arbitration and the Resurgence of Unconscionability*, 52 BUFF. L. REV. 185, 198 (2004); David Horton, *Unconscionability Wars*, 106 NW. U. L. REV. 387 (2012); Aaron-Andrew P. Bruhl, *The Unconscionability Game: Strategic Judging and the Evolution of Federal Arbitration Law*, 83 N.Y.U. L. REV. 1420 (2008).

[245] *See* Stephen E. Friedman, *A Pro-Congress Approach to Arbitration and Unconscionability*, 106 NW. L. REV. 53, 53–55 (2011). In *Concepcion*, the Supreme Court held that a California rule that struck down class action waivers contained in arbitration clauses as unconscionable interfered with the "fundamental attributes of arbitration." AT&T Mobility LLC v. Concepcion, 563 U.S. 333, 344 (2011).

[246] *See* Brian M. McCall, *Demystifying Unconscionability: A Historical and Empirical Analysis*, 65 VILL. L. REV. 773, 807 (2020) (comparing the number of unconscionability challenges in arbitration cases and their rate of success before and after *Concepcion* and concluding that the "relatively unchanged data suggests that the U.S. Supreme Court's decision in *AT&T Mobility LLC v. Concepcion* has not had as significant an effect on unconscionability challenges to agreements to arbitrate as may have been anticipated.") (footnotes omitted); *see also* Christopher R. Drahozal, *FAA Preemption after* Concepcion, 35 BERKELEY J. EMP. & LAB. L. 153, 173 (2014) (arguing that "*Concepcion* does not preempt all or even most state unconscionability doctrine as applied to arbitration agreements.").

approximately 7% of motions to compel arbitration and were related to *compelling* arbitration in a positive and statistically significant manner. Our study therefore contrasts with other empirical studies that found that courts commonly rely on unconscionability to refuse to enforce arbitration agreements.[247]

This result also belies the suggestion that drafters of adhesive arbitration agreements have taken advantage of pro-arbitration Supreme Court decisions to insert truly unconscionable terms (*i.e.*, terms that would render any contract unconscionable) into these agreements.[248] This result also undermines the proposition that unconscionability continues to be "the most attractive way for state courts to incorporate equity and avoid violating the FAA when determining whether to enforce mandatory arbitration provisions."[249]

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[247] *See, e.g.*, Knapp, *supra* note 219, at 623 (finding that "not only did the annual number of unconscionability claims in arbitration cases show a consistent increase beginning in 1997, their relative rate of success also increased over the first years of the new century"); *see also* Larry A. DiMatteo & Bruce Louis Rich, *A Consent Theory of Unconscionability: An Empirical Study of Law in Action*, 33 FLA. ST. U. L. REV. 1067, 1113 (2006) (finding a success rate for unconscionability arguments in the arbitration context of 75% as opposed to an overall success rate of 37.8% in contractual disputes). Other studies are more in line with our findings, although they still report higher success rate of unconscionability arguments in arbitration cases. *See, e.g.*, McCall, *supra* note 246, at 806-07 (finding a success rate of 25% but noting that "although agreements to arbitrate were the most litigated clause, they were found unconscionable at a lower rate than the average for all clauses reviewed"); *see also* Susan Landrum, *Much Ado About Nothing?: What the Numbers Tell Us About How State Courts Apply the Unconscionability Doctrine to Arbitration Agreements*, 97 MARQ. L. REV. 751, 779, 802 (2014) (finding a success rate of 25% and that "some states, such as Missouri, Nevada, New Mexico, and Illinois, [] are more likely to find arbitration agreements unconscionable than other types of contracts," but also noting that "the vast majority of states do not appear to take that approach.").

[248] *See, e.g.*, Bruhl, *supra* note 244, at 1441-42 ("[I]t might be that the Supreme Court's pro-arbitration rulings, together with continued tort reform sentiment, emboldened some parties to draft increasingly one-sided or burdensome arbitration provisions, so that the number of truly unconscionable agreements was actually increasing over some period."). There will, of course, always be outliers. *See generally, e.g.*, Tamar Meshel, *Two Comes Before Four and Five: The FAA in* Campbell v. Keagle, 117 NW. U. L. REV. ONLINE 74 (2022) (discussing a federal district court decision finding an arbitration agreement unconscionable that was later overturned by the Seventh Circuit).

[249] Weyman Johnson et al., *Privatization of Employment Claims: Perhaps a Hybrid Approach Will Free American Society from the Epic Trap the Supreme Court Has Sprung Without Forfeiting All Advantages of Arbitration*, 14 WM. & MARY BUS. L. REV. 353, 381

The repeated rejection of unconscionability arguments may suggest that many of the attempts to challenge arbitration agreements on unconscionability grounds are simply meritless. Unconscionability may also be a "loser of an argument" in the arbitration context just as in any other contractual context.[250] Under many state contract laws, to invalidate a contract on unconscionability grounds requires a showing of both substantive and procedural unconscionability, with the adhesive nature of a contract alone being insufficient.[251] Moreover, courts tend to refuse to enforce a contract on unconscionability grounds only if the contract is permeated with procedural and/or substantive unconscionability as opposed to containing only one or two unconscionable provisions that may be severed.[252] For a contract to be permeated with unconscionability is a high threshold to meet for most contracts, with or without arbitration clauses. Having said that, the fact that unconscionability arguments were most successful (even if rarely) in employment and consumer disputes does suggest that some arbitration clauses in these contexts contain problematic provisions.

We were surprised that delegation arguments were not raised more often alongside scope and unconscionability challenges.[253] Most courts do not require an explicit delegation clause to be included in the contract but rather view the incorporation of institutional arbitration rules that contain a delegation provision

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(2023)*; see also*, Horton*, supra* note 244, at 388 ("The unconscionability doctrine has emerged as the primary check on drafter overreaching" in arbitration agreements).

[250] Bruhl, *supra* note 244, at 1442.

[251] See references in *supra* note 82.

[252] See, e.g., Al-Safin v. Cir. City Stores, Inc., 394 F.3d 1254, 1262 (9th Cir. 2005) (refusing to enforce an arbitration agreement because it was "permeated with unconscionable provisions").

[253] As discussed above, we tested the general frequency of delegation arguments as well as their frequency in cases involving scope and unconscionability arguments. We did not code delegation as an independent argument because it is not in itself a challenge to the arbitration agreement. Rather, delegation is a challenge to the court's jurisdiction to decide a challenge to the arbitration agreement. We did, however, run a regression that included delegation as a variable. The result indicated a statistically significant positive relationship between a party raising a delegation argument and the court compelling arbitration.

as evidencing the parties' consent to such delegation.[254] Moreover, once a party has established "clear and unmistakable" intention to delegate arbitrability challenges to the arbitrator, the court must refer such challenges to the arbitrator unless the validity of the delegation clause itself is challenged.[255] The relative infrequency with which parties raised delegation arguments may therefore suggest that delegation clauses are not used in arbitration agreements as commonly as some have suggested,[256] or that defendants do not necessarily invoke these clauses in motions to compel arbitration even where they are present. Having said that, delegation arguments were raised far more often in employment and consumer disputes than in business disputes. This result could be because scope and unconscionability challenges, which are "delegable," were raised more frequently in the employment and consumer contexts, perhaps prompting employers and businesses to attempt to refer these challenges to arbitration. One should also note that although courts are required to enforce valid delegation clauses, a fair number of these clauses (more than we had expected) were rejected by the courts either because there was insufficient

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[254] *See, e.g.*, Commc'ns Workers of Am. v. AT&T Inc., 6 F.4th 1344, 1347 (D.C. Cir. 2021); *see also* Carrone v. UnitedHealth Grp. Inc., No. 20-2742, 2021 WL 3520809 (3rd Cir. 2021); Airbnb, Inc. v. Doe, 336 So.3d 698, 704 (Fla. 2022).

[255] Recently, the Ninth Circuit held that the threshold for challenging a delegation clause is low: "if a party's challenge mentions and specifically relates to the validity of the delegation provision in its opposition to the motion to compel arbitration or other pleading, the federal court has a green light to consider those arguments." Bielski v. Coinbase, 87 F.4th 1003, 1010 (9th Cir. 2023), *rev'd on other grounds*, 599 U.S. 736 (2023). The Ninth Circuit noted that this low threshold has also been applied by the Second, Third, and Fourth Circuits. *Id.* In contrast, the Sixth and Eleventh Circuits have required that the court "first evaluate the substance of the challenge." *Id.* at 1011.

[256] *See generally, e.g.*, *Arbitration Study: Report to Congress, Pursuant to Dodd–Frank Wall Street Reform and Consumer Protection Act § 1028(a)*, CONSUMER FIN. PROT. BUREAU (2015), https://www.consumerfinance.gov/data-research/research-reports/arbitration-study-report-to-congress-2015/ [https://perma.cc/ZMS8-5PHP] (reporting the results of an empirical study of arbitration clauses in consumer financial products, in which up to 71.4% were found to contain a delegation clause); *see also* David Horton, *Arbitration as Delegation*, 86 N.Y.U. L. REV. 437, 465-66 (2011) ("[C]lever drafters again capitalized on their dominion over contract terms. First in business-to-business transactions and then expanding to standard form contracts, companies added 'delegation clauses' that gave the arbitrator—not courts—the exclusive ability to resolve the very issue of whether the arbitration clause was valid."); David Horton, *Infinite Arbitration Clauses*, 168 U. PA. L. REV. 633, 687 (2020) ("[C]ompanies are trying to use infinite language in tandem with delegation clauses to almost completely opt out of the court system—a trend that will only accelerate after *Henry Schein*.").

evidence of a "clear and unmistakable" intention to delegate or because the delegation clause was itself invalid.

Finally, the least frequently raised challenge to arbitration agreements was waiver of the right to arbitrate. Waiver was raised infrequently even though, like existence/formation arguments, waiver arguments are to be decided by the court rather than delegated to the arbitrator. The lower frequency with which parties raised waiver arguments might be a result of some courts requiring a showing of prejudice to establish that a party has waived its right to arbitrate. In June 2022, the Supreme Court decided *Morgan v. Sundance*, in which the Court held that courts may no longer require a party to establish prejudice as part of the waiver analysis in the arbitration context.[257] While this decision may encourage parties to challenge arbitration agreements on waiver grounds, post-*Morgan* courts can still dismiss waiver challenges where the defendant did not substantially invoke the litigation process.[258] Moreover, some state courts continue to require a showing of prejudice in order to establish a waiver of the right to arbitrate under state law.[259]

The fact that waiver arguments were most successful in employment disputes suggests that employers might be delaying their invocation of arbitration clauses contained in employment contracts in response to a court action commenced by an employee. A similar trend is evident in business disputes and to a lesser extent in consumer disputes. These trends may suggest attempts by defendants in these types of cases to take advantage of court procedures, such as discovery, before turning to arbitration where discovery is typically more restricted.

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[257] *See generally* Morgan v. Sundance, Inc., 596 U.S. 411 (2022).

[258] *See generally, e.g.*, Zenon v. Dover Downs, Inc., No. 21-1194-RGA, 2022 WL 2304118 (D. Del. June 27, 2022); *see also* Streety v. Parsley Energy Operations, LLC, MO:20-CV-00049-DC, 2022 WL 2783852 (W.D. Tex. June 17, 2022); Brady v. Verizon Wireless (Vaw) LLC, No. 22-cv-0187-bhl, 2022 WL 3268283 (E.D. Wis. July 19, 2022); Hudson v. Peak Med. New Mexico No. 3, LLC, No. 1:21-cv-01126 MIS/KK, 2022 WL 2904378 (D. N.M. July 22, 2022); De Jesus v. Gregorys Coffee Mgmt., LLC, 22-CV-6305 (MKB) (TAM), 2022 WL 3097883 (E.D. N.Y. Aug. 4, 2022).

[259] *See generally, e.g.*, Hyundai Constr. Equip. Ams., Inc. v. S. Lift Trucks, LLC, 389 So. 3d 1107 (Ala. 2023); *see also* Brown v. JC Austintown, Inc., 209 N.E.3d 161 (Ohio Ct. App. 2023); Mac Haik Chevrolet, Ltd. v. Parker, No. 01-22-00685-CV, 2023 WL 1786163 (Tex. App. Feb. 7, 2023).

E. *Political Association of the Judge(s)*

In the federal district courts, both Democratic and Republican judges compelled arbitration in the majority of motions before them with a higher rate among Republican judges. In the federal circuit courts of appeals, single-party Republican panels compelled arbitration far more frequently than majority-Republican panels, suggesting that the minority Democratic judge on the panel may have some influence over the outcome. The same influence does not seem to be present among majority-Democratic panels.[260]

In state trial courts, both Democratic and Republican judges compelled arbitration in the majority of motions before them with a higher rate among Democratic judges. We note that most of our state trial court decisions were from California where the compel rate was highest. In state appellate courts, all-Republican panels compelled arbitration far more frequently than majority-Republican panels, suggesting that the minority Democratic judge on the panel may have some influence over the outcome. The same influence does not seem to be present among majority-Democratic panels.

However, once we controlled for the type and level of court, type of dispute, and arguments using regression analysis, much of the partisan effect that we identified in our frequencies analysis disappeared. Only Republican judges on states' highest appellate courts and federal district courts as well as Democratic judges on state trial courts remained statistically significantly linked to compelling arbitration. This result suggests that the outcomes of motions to compel arbitration under FAA arbitration are only a function of the judges' political association in a handful of situations in combination with specific types and levels of courts.

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[260] This is in line with Sunstein et al.'s results. *See* Sunstein et al., *supra* note 26, at 327*; see also* James Stribopoulos & Moin A. Yahya, *Does a Judge's Party of Appointment or Gender Matter to Case Outcomes?: An Empirical Study of the Court of Appeal for Ontario*, 45 OSGOODE HALL L.J. 315, 347 (2007) (finding a similar dampening effect in the Canadian context).

CONCLUSION

Arbitration under the FAA has become "one of the most controversial areas of the American civil justice system."[261] While the Supreme Court has espoused "pro-arbitration" jurisprudence and while the FAA requires both state and federal courts to enforce valid arbitration agreements, the interpretation and application of the act is ultimately left to the lower courts—the gatekeepers of the FAA. At the same time, little empirical attention has been paid to the daily operation of the act in the state and lower federal courts.

Our study reveals that there are several predictors of the outcome of motions to compel arbitration. First, certain arguments raised by the parties are statistically significantly linked to the outcome of compelling arbitration, and this holds true across state and federal courts, location of court, and trial and appellate courts. In addition, different types of disputes are associated with varying compel rates, and a few specific combinations of type/level of court and political association also proved to be linked to compelling arbitration. Our study also provides several important insights for parties and policymakers into the operation of the FAA across the country.

The results of our study can inform the litigation strategy of parties either attempting to enforce or challenge arbitration agreements. Our results confirm that efforts by parties to forum-shop by seeking to remove motions to compel arbitration to federal courts or to remand such motions back to state court are not well spent. For parties opposing motions to compel arbitration, our study strongly suggests that unconscionability arguments are unlikely to lead to denial of such motions in most cases. Scope arguments are also unlikely to lead to denial of such motions, albeit to a lesser extent. Parties to employment disputes, in particular, should carefully consider their chances of succeeding in a challenge to the enforcement of an arbitration agreement where that challenge is based on unconscionability grounds.

For policymakers, our study shows that the vast majority of arbitration agreements, even in the consumer and employment context, are not generally considered "unfair" (in the sense of legally unconscionable) by the courts. Rather, the more problematic

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[261] David Horton, *Forced Robot Arbitration*, 109 CORNELL L. REV. 679 (2024).

aspects of consumer and employment arbitration agreements, at least from a legal standpoint, appear to be related to their formation. Therefore, policymakers should focus legislative efforts on regulating web-based and mobile-based contracts as well as how consumers and employees assent to them rather than restricting the enforcement of arbitration agreements generally.

Finally, our results should provide some comfort to both supporters and opponents of arbitration in showing that the political association of judges does not impact the outcome of motions to compel arbitration in any meaningful way. While the compel rate of Republican federal district court judges and Democrat state trial judges seems to be linked to the outcome of compelling arbitration, the difference in compel rate between all other combinations of courts and judges was not meaningful.

This result is interesting for at least two reasons. First, it stands in contrast to many of the Supreme Court's FAA decisions, which were divided along ideological lines.[262] Second, the result stands in contrast to the politicized nature of arbitration, the FAA in the literature, and in American society generally. Arbitration (at least in the employment and consumer context) is frequently viewed by the left as a neoliberal tool used by businesses to evade legal and public accountability and by the right as a practical and economic necessity that allows businesses to manage litigation risk and costs. However, our study shows that these opposite political perceptions of arbitration do not meaningfully impact the outcome of motions to compel arbitration. Rather, the outcome of such motions is primarily affected by the arguments raised by the parties and the type of dispute. Therefore, a century after the enactment of the FAA, a judicial consensus may have emerged that arbitration, while not perfect, is simply a necessity in today's civil justice system.

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[262] *See supra* note 56.

APPENDIX[263]

A. *Stage One: Frequencies*

Table 1A: Motions to Compel Arbitration By Type of Dispute

Type of dispute	Arbitration compelled/denied			
	compelled	compelled in part	denied	Total
business	150	26	72	248
	60.48	10.48	29.03	100.00
consumer	346	31	188	565
	61.24	5.49	33.27	100.00
employment	428	15	130	573
	74.69	2.62	22.69	100.00
international	29	1	3	33
	87.88	3.03	9.09	100.00
labor	18	0	13	31
	58.06	0.00	41.94	100.00
Total	971	73	406	1450
	66.97	5.03	28.00	100.00

First row has *frequencies* and second row has *row percentages*.

[263] These tables were generated in the STATA statistics package using the asdoc command written by Attaullah Shah, ASDOC: Stata module to create high-quality tables in MS Word from Stata output, Statistical Software Components S458466, Boston College Department of Economics, revised 23 Jul 2021 at https://ideas.repec.org/c/boc/bocode/s458466.html [https://perma.cc/NJ4Q-XPLH].

Table 1B: Motions to Compel Arbitration in Federal District Courts By Type of Dispute

Type of dispute	Arbitration compelled/denied			
	compelled	compelled in part	denied	Total
business	113	20	37	170
	66.47	11.76	21.76	100.00
consumer	188	16	62	266
	70.68	6.02	23.31	100.00
employment	262	9	58	329
	79.64	2.74	17.63	100.00
international	26	1	2	29
	89.66	3.45	6.90	100.00
labor	14	0	10	24
	58.33	0.00	41.67	100.00
Total	603	46	169	818
	73.72	5.62	20.66	100.00

First row has *frequencies* and second row has *row percentages*.

Table 1C: Motions to Compel Arbitration in Federal Circuit Courts of Appeals By Type of Dispute

Type of dispute	Arbitration compelled/denied		
	compelled	denied	Total
business	5	11	16
	31.25	68.75	100.00
consumer	16	16	32
	50.00	50.00	100.00
employment	19	14	33
	57.58	42.42	100.00
international	2	1	3
	66.67	33.33	100.00
labor	3	1	4
	75.00	25.00	100.00
Total	45	43	88
	51.14	48.86	100.00

First row has *frequencies* and second row has *row percentages*.

Table 1D: Motions to Compel Arbitration in State Supreme Courts By Type of Dispute

Type of dispute	Arbitration compelled/denied		
	compelled	denied	Total
business	3	4	7
	42.86	57.14	100.00
consumer	6	5	11
	54.55	45.45	100.00
employment	3	1	4
	75.00	25.00	100.00
Total	12	10	22
	54.55	45.45	100.00

First row has *frequencies* and second row has *row percentages*.

Table 1E: Motions to Compel Arbitration in State Appellate Courts By Type of Dispute

Type of dispute	Arbitration compelled/denied			
	compelled	compelled in part	denied	Total
business	10	3	14	27
	37.04	11.11	51.85	100.00
consumer	46	4	59	109
	42.20	3.67	54.13	100.00
employment	26	2	41	69
	37.68	2.90	59.42	100.00
international	1	0	0	1
	100.00	0.00	0.00	100.00
labor	0	0	2	2
	0.00	0.00	100.00	100.00
Total	83	9	116	208
	39.90	4.33	55.77	100.00

First row has *frequencies* and second row has *row percentages*.

Table 1F: Motions to Compel Arbitration in State Trial Courts By Type of Dispute

Type of dispute	Arbitration compelled/denied			
	compelled	compelled in part	denied	Total
business	19	3	6	28
	67.86	10.71	21.43	100.00
consumer	90	11	46	147
	61.22	7.48	31.29	100.00
employment	118	4	16	138
	85.51	2.90	11.59	100.00
labor	1	0	0	1
	100.00	0.00	0.00	100.00
Total	228	18	68	314
	72.61	5.73	21.66	100.00

First row has *frequencies* and second row has *row percentages*.

Table 2A: Existence/Formation Arguments By Type of Dispute

Existence/ formation	Type of dispute					
	business	consumer	employment	international	labor	Total
n	106	162	232	15	2	537
	19.74	30.17	43.20	2.79	.10	100.00
y	142	403	341	18	9	913
	15.55	44.14	37.35	1.97	.99	100.00
Total	248	565	573	33	1	1450
	17.10	38.97	39.52	2.28	.14	100.00

First row has *frequencies* and second row has *row percentages*.

Table 2B: Scope Arguments By Type of Dispute

Scope	Type of dispute					
	business	consumer	employment	international	labor	Total
n	128	404	416	19	6	973
	13.16	41.52	42.75	1.95	0.62	100.00
y	120	161	157	14	25	477
	25.16	33.75	32.91	2.94	5.24	100.00
Total	248	565	573	33	31	1450
	17.10	38.97	39.52	2.28	2.14	100.00

First row has *frequencies* and second row has *row percentages*.

Table 2C: Unconscionability Arguments By Type of Dispute

Unconscionability	Type of dispute					
	business	consumer	employment	international	labor	Total
n	221	425	344	32	29	1051
	21.03	40.44	32.73	3.04	2.76	100.00
y	27	140	229	1	2	399
	6.77	35.09	57.39	0.25	0.50	100.00
Total	248	565	573	33	31	1450
	17.10	38.97	39.52	2.28	2.14	100.00

First row has *frequencies* and second row has *row percentages*.

Table 2D: Waiver Arguments By Type of Dispute

Waiver	Type of dispute					
	business	consumer	employment	international	labor	Total
n	209	489	498	29	28	1253
	16.68	39.03	39.74	2.31	2.23	100.00
y	39	76	75	4	3	197
	19.80	38.58	38.07	2.03	1.52	100.00
Total	248	565	573	33	31	1450
	17.10	38.97	39.52	2.28	2.14	100.00

First row has *frequencies* and second row has *row percentages*.

Table 3A: Motions to Compel Arbitration in Federal and State Courts

Level of court	Arbitration compelled/denied		
	compelled	denied	Total
appellate	92	116	208
	44.23	55.77	100.00
circuit	45	43	88
	51.14	48.86	100.00
district	649	169	818
	79.34	20.66	100.00
supreme	12	10	22
	54.55	45.45	100.00
trial	246	68	314
	78.34	21.66	100.00
Total	1044	406	1450
	72.00	28.00	100.00

First row has *frequencies* and second row has *row percentages*.

Table 3B: Successful Appeals From Motions to Compel Arbitration to Federal Circuit Courts of Appeals

Outcome	affirming lower court?			
	n	y	y and n	Total
compelled	21	24	0	45
	46.67	53.33	0.00	100.00
denied	8	34	1	43
	18.60	79.07	2.33	100.00
Total	29	58	1	88
	32.95	65.91	1.14	100.00

First row has *frequencies* and second row has *row percentages*.

Table 3C: Successful Appeals From Motions to Compel Arbitration to State Intermediary Appellate and Supreme Courts

Outcome	affirming lower court?			
	n	y	y and n	Total
compelled	68	27	0	95
	71.58	28.42	0.00	100.00
compelled in part	0	2	7	9
	0.00	22.22	77.78	100.00
denied	15	111	0	126
	11.90	88.10	0.00	100.00
Total	83	140	7	230
	36.09	60.87	3.04	100.00

First row has *frequencies* and second row has *row percentages*.

Table 4A: Motions to Compel Arbitration by Federal District Court Location

Federal district court location (by state)	Arbitration compelled/denied			
	compelled	compelled in part	denied	Total
Alabama	7	0	0	7
	1.16	0.00	0.00	0.86
Alaska	1	0	0	1
	0.17	0.00	0.00	0.12
Arizona	17	1	3	21
	2.82	2.17	1.78	2.57
Arkansas	7	0	1	8
	1.16	0.00	0.59	0.98
California	124	11	42	177
	20.56	23.91	24.85	21.64
Colorado	6	1	2	9
	1.00	2.17	1.18	1.10
Connecticut	7	0	5	12
	1.16	0.00	2.96	1.47
Delaware	4	0	1	5
	0.66	0.00	0.59	0.61
District of Columbia	2	1	2	5
	0.33	2.17	1.18	0.61
Florida	42	2	13	57
	6.97	4.35	7.69	6.97
Georgia	10	0	3	13
	1.66	0.00	1.78	1.59
Hawai'i	2	0	0	2
	0.33	0.00	0.00	0.24
Idaho	2	0	1	3
	0.33	0.00	0.59	0.37
Illinois	17	3	3	23
	2.82	6.52	1.78	2.81
Indiana	3	0	2	5
	0.50	0.00	1.18	0.61

Iowa	0	0	1	1
	0.00	0.00	0.59	0.12
Kansas	4	0	2	6
	0.66	0.00	1.18	0.73
Kentucky	7	0	2	9
	1.16	0.00	1.18	1.10
Louisiana	12	1	1	14
	1.99	2.17	0.59	1.71
Maine	1	0	0	1
	0.17	0.00	0.00	0.12
Maryland	12	0	0	12
	1.99	0.00	0.00	1.47
Massachusetts	6	1	2	9
	1.00	2.17	1.18	1.10
Michigan	13	1	3	17
	2.16	2.17	1.78	2.08
Minnesota	4	0	2	6
	0.66	0.00	1.18	0.73
Mississippi	2	1	1	4
	0.33	2.17	0.59	0.49
Missouri	23	1	2	26
	3.81	2.17	1.18	3.18
Montana	0	0	2	2
	0.00	0.00	1.18	0.24
Nebraska	6	0	2	8
	1.00	0.00	1.18	0.98
Nevada	8	0	4	12
	1.33	0.00	2.37	1.47
New Hampshire	2	0	0	2
	0.33	0.00	0.00	0.24
New Jersey	19	3	9	31
	3.15	6.52	5.33	3.79
New Mexico	8	0	1	9
	1.33	0.00	0.59	1.10
New York	52	7	15	74
	8.62	15.22	8.88	9.05
North Carolina	13	0	3	16
	2.16	0.00	1.78	1.96

Ohio	20	0	2	22
	3.32	0.00	1.18	2.69
Oklahoma	3	0	1	4
	0.50	0.00	0.59	0.49
Oregon	5	0	5	10
	0.83	0.00	2.96	1.22
Pennsylvania	27	0	6	33
	4.48	0.00	3.55	4.03
Puerto Rico	5	1	0	6
	0.83	2.17	0.00	0.73
Rhode Island	1	0	0	1
	0.17	0.00	0.00	0.12
South Carolina	14	1	3	18
	2.32	2.17	1.78	2.20
South Dakota	3	0	1	4
	0.50	0.00	0.59	0.49
Tennessee	7	0	1	8
	1.16	0.00	0.59	0.98
Texas	40	5	15	60
	6.63	10.87	8.88	7.33
Utah	2	0	0	2
	0.33	0.00	0.00	0.24
Virgin Islands	3	0	0	3
	0.50	0.00	0.00	0.37
Virginia	5	2	0	7
	0.83	4.35	0.00	0.86
Washington	14	2	3	19
	2.32	4.35	1.78	2.32
West Virginia	3	1	2	6
	0.50	2.17	1.18	0.73
Wisconsin	8	0	0	8
	1.33	0.00	0.00	0.98
Total	603	46	169	818
	100.00	100.00	100.00	100.00

First row has *frequencies* and second row has *column percentages*.

Table 4B: Motions to Compel Arbitration by Federal Circuit Courts of Appeals

Arbitration compelled/ denied	Circuit												
	1	2	3	4	5	6	7	8	9	10	11	D.C.	Total
compelled	3	2	2	1	5	5	3	3	15	3	2	1	45
	6.7	4	4.44	2.22	11.11	11.11	6.67	6.67	33.33	6.67	4.44	2.22	100.00
denied	2	5	1	3	5	5	2	1	13	1	5	0	43
	4.7	11.7	2.33	6.98	11.63	11.63	4.65	2.33	30.23	0.33	11.6	0.00	100.00
Total	5	7	3	4	10	10	5	4	28	4	7	1	88
	5.68	7.95	3.41	4.55	11.36	11.36	5.68	4.55	31.82	4.55	7.95	1.14	100.00

First row has *frequencies* and second row has *row percentages*.

Table 4C: Motions to Compel Arbitration by State Courts

State court location	Arbitration compelled/denied			
	compelled	compelled in part	denied	Total
Alabama	2	0	0	2
	0.62	0.00	0.00	0.37
Arizona	3	0	1	4
	0.93	0.00	0.52	0.74
Arkansas	3	0	7	10
	0.93	0.00	3.61	1.84
California	224	18	103	345
	69.35	66.67	53.09	63.42
Connecticut	1	0	3	4
	0.31	0.00	1.55	0.74
Delaware	1	0	0	1
	0.31	0.00	0.00	0.18
Florida	7	0	2	9
	2.17	0.00	1.03	1.65
Georgia	4	0	6	10

	1.24	0.00	3.09	1.84
Illinois	1	2	2	5
	0.31	7.41	1.03	0.92
Indiana	0	0	2	2
	0.00	0.00	1.03	0.37
Kentucky	2	0	4	6
	0.62	0.00	2.06	1.10
Louisiana	1	1	0	2
	0.31	3.70	0.00	0.37
Maine	0	0	2	2
	0.00	0.00	1.03	0.37
Maryland	1	0	1	2
	0.31	0.00	0.52	0.37
Massachusetts	2	0	2	4
	0.62	0.00	1.03	0.74
Michigan	3	0	0	3
	0.93	0.00	0.00	0.55
Minnesota	0	1	1	2
	0.00	3.70	0.52	0.37
Mississippi	2	0	6	8
	0.62	0.00	3.09	1.47
Missouri	1	0	5	6
	0.31	0.00	2.58	1.10
Nevada	2	0	0	2
	0.62	0.00	0.00	0.37
New Jersey	12	1	9	22
	3.72	3.70	4.64	4.04
New Mexico	2	0	0	2
	0.62	0.00	0.00	0.37
New York	11	0	2	13
	3.41	0.00	1.03	2.39
Ohio	2	0	1	3
	0.62	0.00	0.52	0.55
Oklahoma	1	0	0	1
	0.31	0.00	0.00	0.18
Pennsylvania	2	0	4	6
	0.62	0.00	2.06	1.10
Puerto Rico	1	0	0	1

	0.31	0.00	0.00	0.18
South Carolina	1	1	4	6
	0.31	3.70	2.06	1.10
Tennessee	1	0	2	3
	0.31	0.00	1.03	0.55
Texas	23	3	20	46
	7.12	11.11	10.31	8.46
Vermont	1	0	0	1
	0.31	0.00	0.00	0.18
Virgin Islands	1	0	1	2
	0.31	0.00	0.52	0.37
Virginia	0	0	1	1
	0.00	0.00	0.52	0.18
Washington	3	0	1	4
	0.93	0.00	0.52	0.74
West Virginia	1	0	2	3
	0.31	0.00	1.03	0.55
Wisconsin	1	0	0	1
	0.31	0.00	0.00	0.18
Total	323	27	194	544
	100.00	100.00	100.00	100.00

First row has *frequencies* and second row has *column percentages*.

Table 5A: Motions to Compel Arbitration According to Judges' Political Association

Arbitration compelled/ denied	Judge(s) political association					
	D	R	majority D	majority R	n/a	Total
compelled	370	299	34	30	237	970
	38.14	30.82	3.51	3.09	24.43	100.00
compelled in part	28 38.89	19 26.39	2 2.78	2 2.78	21 29.17	72 100.00
denied	137	91	50	36	92	406
	33.74	22.41	12.32	8.87	22.66	100.00
Total	535	409	86	68	350	1448
	36.95	28.25	5.94	4.70	24.17	100.00

First row has *frequencies* and second row has *row percentages*.

Table 5B: Motions to Compel Arbitration According to Judges' Political Association in Federal District Courts

Judge(s) political association	Arbitration compelled/denied			
	compelled	compelled in part	denied	Total
D	278	20	86	384
	72.40	5.21	22.40	100.00
R	236	15	59	310
	76.13	4.84	19.03	100.00
n/a	89	11	24	124
	71.77	8.87	19.35	100.00
Total	603	46	169	818
	73.72	5.62	20.66	100.00

First row has *frequencies* and second row has *row percentages*.

Table 5C: Motions to Compel Arbitration According to Judges' Political Association in Federal Circuit Courts of Appeals

Judge(s) political association	Arbitration compelled/denied		
	compelled	denied	Total
D	4	6	10
	40.00	60.00	100.00
R	15	8	23
	65.22	34.78	100.00
majority D	8	13	21
	38.10	61.90	100.00
majority R	17	16	33
	51.52	48.48	100.00
n/a	1	0	1
	100.00	0.00	100.00
Total	45	43	88
	51.14	48.86	100.00

First row has *frequencies* and second row has *row percentages*.

Table 5D: Motions to Compel Arbitration According to Judges' Political Association in State Trial Courts

Judge(s) political association	Arbitration compelled/denied			
	compelled	compelled in part	denied	Total
D	68	7	15	90
	75.56	7.78	16.67	100.00
R	28	2	10	40
	70.00	5.00	25.00	100.00
n/a	131	8	43	182
	71.98	4.40	23.63	100.00
Total	227	17	68	312
	72.76	5.45	21.79	100.00

First row has *frequencies* and second row has *row percentages*.

Table 5E: Motions to Compel Arbitration According to Judges' Political Association in State Appellate Courts

Judge(s) political association	Arbitration compelled/denied			
	compelled	compelled in part	denied	Total
D	20	1	30	51
	39.22	1.96	58.82	100.00
R	20	2	14	36
	55.56	5.56	38.89	100.00
majority D	26	2	37	65
	40.00	3.08	56.92	100.00
majority R	13	2	20	35
	37.14	5.71	57.14	100.00
n/a	16	2	25	43
	37.21	4.65	58.14	100.00
Total	95	9	126	230
	41.30	3.91	54.78	100.00

First row has *frequencies* and second row has *row percentages*.

B. *Stage Two: Logistic Regressions*

Table R1: Logistic Regression of Outcome of Motions to Compel Arbitration on Court Type

Type and level of court	Coef.	St. Err.	t-value	p- value	Sig
State Appellate	.661	.298	-0.92	.358	
State Trial	3.015	1.355	2.45	.014	**
Federal District	3.2	1.398	2.66	.008	***
Federal Circuit	.872	.417	-0.29	.775	
Constant	1.2	.514	0.43	.67	
Mean dependent var	1.280	SD dependent var		0.449	
Pseudo r-squared	0.070	Number of obs		1450.000	
Chi-square	120.174	Prob > chi2		0.000	
Akaike crit. (AIC)	1609.391	Bayesian crit. (BIC)		1635.787	

*** p<.01, ** p<.05, * p<.1*

Table R2: Logistic Regression of Outcome of Motions to Compel Arbitration on Type of Dispute

Type of dispute	Coef.	St. Err.	t-value	p-value	Sig
Business	1.765	.688	1.46	.145	
Consumer	1.448	.543	0.99	.323	
Employment	2.461	.929	2.39	.017	**
International	7.222	5.103	2.80	.005	***
Constant(=labor)	1.385	.504	0.89	.371	
Mean dependent var	1.280	SD dependent var		0.449	
Pseudo r-squared	0.015	Number of obs		1450.000	
Chi-square	26.032	Prob > chi2		0.000	
Akaike crit. (AIC)	1703.533	Bayesian crit. (BIC)		1729.929	

*** p<.01, ** p<.05, * p<.1*

Table R3: Logistic Regression of Outcome of Motions to Compel Arbitration on Judges' Political Association

Political Association	Coef.	St. Err.	t-value	p-value	Sig
Democratic	1.036	.162	0.23	.822	
Republican	1.246	.212	1.29	.195	
Majority Democratic	.257	.064	-5.44	0	**
Majority Republican	.317	.086	-4.23	0	***
Constant (=n/a)	2.804	.341	8.49	0	***

Mean dependent var	1.280	SD dependent var	0.449
Pseudo r-squared	0.036	Number of obs	1448.000
Chi-square	61.755	Prob > chi2	0.000
Akaike crit. (AIC)	1666.494	Bayesian crit. (BIC)	1692.884

*** *p<.01*, ** *p<.05*, * *p<.1*

Table R4: Logistic Regression of Outcome of Motions to Compel Arbitration on Various Variables

Type and level of court, type of dispute, and political association	Coef.	St. Err.	t-value	p-value	Sig
State Appellate	.671	.307	-0.87	.383	
State Trial	2.709	1.272	2.12	.034	*
Federal District	2.719	1.235	2.20	.028	*
Federal Circuit	.834	.407	-0.37	.709	
Business	1.806	.739	1.44	.149	
Consumer	1.694	.671	1.33	.183	
Employment	2.65	1.051	2.46	.014	*
International	7.147	5.197	2.70	.007	**
Democratic	.985	.172	-0.09	.929	
Republican	1.268	.242	1.24	.214	
Majority Democratic	.771	.23	-0.87	.383	
Majority Republican	.899	.295	-0.32	.746	
Constant (=State Supreme, Labor, n/a)	.632	.382	-0.76	.448	

Mean dependent var	1.280	SD dependent var	0.45
Pseudo r-squared	0.083	Number of obs	1448
Chi-square	143.440	Prob > chi2	0.00
Akaike crit. (AIC)	1600.810	Bayesian crit. (BIC)	1669

**** p<.01, ** p<.05, * p<.1*

Table R5: Logistic Regression of Outcome of Motions to Compel on Interactive Court Type and Political Association plus Type of Dispute

Interactive court type-political association and type of dispute	Coef.	St. Err.	t-value	p-value	Sig
State Supreme x Republican	27.115	41.972	2.13	.033	**
State Supreme x majority Democratic	1.364	2.193	0.19	.847	
State Supreme x majority Republican	4.855	7.043	1.09	.276	
State Appellate x n/a	3.089	3.608	0.97	.334	
State Appellate x Democratic	2.414	2.794	0.76	.446	
State Appellate x Republican	4.392	5.195	1.25	.211	
State Appellate x majority Democratic	2.688	3.095	0.86	.391	
State Appellate x majority Republican	2.417	2.857	0.75	.455	
State Trial x n/a	11.423	12.968	2.15	.032	*
State Trial x Democratic	16.72	19.347	2.43	.015	*
State Trial x Republican	10.532	12.419	2.00	.046	*
Federal District x n/a	14.15	16.176	2.32	.02	*
Federal District x Democratic	11.881	13.394	2.20	.028	*
Federal District x Republican	14.696	16.598	2.38	.017	*
Federal Circuit x n/a	562315	3e+08	0.03	.977	
Federal Circuit x Democratic	2.078	2.712	0.56	.575	
Federal Circuit x Republican	6.414	7.718	1.54	.122	
Federal Circuit x majority Democratic	2.202	2.664	0.65	.514	
Federal Circuit x majority Republican	3.626	4.264	1.10	.273	

Business	1.769	.728	1.39	.166	
Consumer	1.66	.66	1.27	.203	
Employment	2.536	1.011	2.33	.02	*
International	7.359	5.386	2.73	.006	**
Constant (=State Supreme x n/a, Labor)	.145	.172	-1.63	.104	

Mean dependent var	1.280	SD dependent var	0.449
Pseudo r-squared	0.091	Number of obs	1448.000
Chi-square	156.508	Prob > chi2	0.000
Akaike crit. (AIC)	1609.742	Bayesian crit. (BIC)	1736.412

**** p<.01, ** p<.05, * p<.1*

Table R6: Logistic Regression of Outcome of Motions to Compel on Interactive Court Type and Political Association plus Type of Dispute & Arguments Raised in Opposition

Interactive court type-political association, type of dispute, and arguments	Coef.	St. Err.	t-value	p-value	Sig
State Supreme x Republican	22.415	34.927	2.00	.046	*
State Supreme x majority Democratic	.921	1.509	0.05	.96	
State Supreme x majority Republican	5.659	8.218	1.19	.233	
State Appellate x n/a	1.972	2.326	0.58	.565	
State Appellate x Democratic	1.085	1.267	0.07	.944	
State Appellate x Republican	1.967	2.363	0.56	.573	
State Appellate x majority Democratic	1.489	1.729	0.34	.732	
State Appellate x majority Republican	1.365	1.631	0.26	.794	
State Trial x n/a	5.242	5.98	1.45	.146	
State Trial x Democratic	8.834	10.276	1.87	.061	*
State Trial x R	4.044	4.829	1.17	.242	
Federal District x n/a	6.912	7.956	1.68	.093	*
Federal District x Democratic	6.05	6.848	1.59	.112	
Federal District x Republican	7.479	8.482	1.77	.076	*
Federal Circuit x n/a	509834.1	2.080e+08	0.03	.974	
Federal Circuit x Democratic	2.049	2.677	0.55	.583	
Federal Circuit x Republican	4.647	5.64	1.27	.206	

Federal Circuit x majority Democratic	1.538	1.872	0.35	.723	
Federal Circuit x majority Republican	1.896	2.255	0.54	.59	
Business	2.654	1.149	2.25	.024	*
Consumer	2.589	1.106	2.23	.026	*
Employment	3.281	1.4	2.78	.005	**
International	13.857	10.386	3.51	0	**
Existence formation	.894	.133	-0.76	.45	
Scope	3.254	.54	7.10	0	**
Unconscionability	7.694	1.665	9.43	0	**
Waiver	1.32	.27	1.36	.175	
Constant (=State Supreme x n/a, Labor)	.1	.119	-1.93	.053	*

Mean dependent var	1.280	SD dependent var	0.449
Pseudo r-squared	0.196	Number of obs	1448.000
Chi-square	336.736	Prob > chi2	0.000
Akaike crit. (AIC)	1437.514	Bayesian crit. (BIC)	1585.296

*** *p<.01, ** p<.05, * p<.1*

Table R7: Logistic Regression of Outcome of Motions to Compel on Court Type interacted with California, Political Association plus Type of Dispute & Arguments Raised in Opposition

Interactive court type-California, type of dispute, and arguments	Coef.	St. Err.	t-value	p-value	Sig
State Appellate Outside California	.523	.252	-1.34	.179	
State Appellate in California	.155	.087	-3.32	.001	**
State Trial Outside California	1.001	.608	0.00	.999	
State Trial in California	1.505	.74	0.83	.406	
Federal District Outside California	1.647	.778	1.06	.291	
Federal District in California	1.036	.522	0.07	.944	
Federal Circuit outside California	.562	.291	-1.11	.266	
Federal (9th) Circuit in California	.741	.488	-0.45	.65	
Business	2.546	1.112	2.14	.032	*
Consumer	2.539	1.097	2.16	.031	*
Employment	3.496	1.508	2.90	.004	**
International	12.31	9.235	3.35	.001	**
Democratic	1.109	.211	0.54	.586	
Republican	1.302	.268	1.28	.199	
Majority Democratic	.922	.307	-0.24	.807	
Majority Republican	.9	.324	-0.29	.769	
Existence formation	.901	.133	-0.71	.479	
Scope	3.152	.522	6.93	0	**
Unconscionability	7.414	1.61	9.23	0	**
Waiver	1.319	.269	1.36	.174	
Constant	.385	.245	-1.50	.134	

Mean dependent var	1.280	SD dependent var	0.449
Pseudo r-squared	0.196	Number of obs	1448.000
Chi-square	337.3	Prob > chi2	0.000
Akaike crit. (AIC)	1423	Bayesian crit. (BIC)	1533.813

*** *p<.01, ** p<.05, * p<.1*