Both economic theory and legal theory assume that sophisticated parties routinely aim to write contracts that are optimal, in the sense of maximizing the parties' joint surplus. But more recent studies analyzing corporate and government bond agreements have suggested that some contract provisions are highly path dependent, or “sticky,” with future agreements only rarely improving upon previous ones.

Analyzing half a million contracts using automated text analysis, this Article demonstrates that the stickiness hypothesis explains the striking lack of choice-of-forum provisions that can be found in agreements between even the most sophisticated commercial parties. When drafting these contracts, external counsel relies heavily on templates, and whether or not a contract includes a forum selection clause is almost exclusively driven by the template that is used to supply the first draft. There is no evidence to suggest that counsel negotiate over the inclusion of choice-of-forum provisions, nor that law firm templates are revised in response to changes in the costs and benefits of incomplete contracting.

Together, the findings reveal a distinct apathy towards the issue of forum selection. From an institutional perspective, this suggests that the role of contract law is significantly more important than is often assumed. Whereas traditional accounts hold that commercial actors would simply contract

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around inefficient defaults, the evidence produced in this paper highlights that default rules are of significant importance for transactions between even the most sophisticated commercial actors.
INTRODUCTION

In the 1990s, Sprint PCS (“Sprint”), one of the leading telecommunications companies in the United States, created a wireless affiliate program. Under the affiliate program, Sprint and its partners would conclude several agreements which established a cooperation between the parties. Under the terms of these agreements, the affiliates would invest “hundreds of millions of dollars” in order to offer services on behalf of Sprint under the Sprint name. In return, a non-compete clause stipulated that the affiliates would be the exclusive providers of Sprint services in their regions covered by the affiliate program.

On December 15th 2004, Sprint announced a planned merger with Nextel Communications, Inc. (“Nextel”), the then fifth leading provider in the U.S. mobile phone industry. Nextel operated stores and offered services in many parts of the United States, including regions covered by Sprint’s affiliate program. After the merger, the Nextel services would be rebranded under the Sprint name. The affiliates did not look favorably upon the planned merger. They alleged that the rebranding of the Nextel stores and services would cause the newly formed Sprint Nextel to directly compete against them in their service areas, thus constituting a violation of the non-compete provision. Consequently, they filed for an injunction seeking to prevent the merger, alleging a breach of contract.

Conspicuously, however, while the agreements that Sprint concluded with its partners under the affiliate program included a choice-of-law clause determining the substantive law applicable in the dispute, none of them included choice-of-forum provision that would determine where the partners could sue. To Sprint, this omission would become detrimental.

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1 These agreements typically included a management agreement, a trademark and service mark license agreement and a services agreement.
3 See Section 2.4 of Sprint PCS Management Agreement between Sprint and Shenandoah Personal Communications Company (November 5, 1999), available at https://www.sec.gov/Archives/edgar/data/354963/000116923204001600/d58657_ex10-4.txt. The agreements that Spectrum used with its other affiliates were virtually identical.
4 The agreements did include an arbitration provision for certain subject matters that did not cover injunctions. See Section 14.2.
In 2005 the affiliates commenced parallel suits in both Delaware\(^5\) and Illinois.\(^6\) In 2008, in the context of a separate dispute regarding the acquisition of Clearwire Corporation by Sprint, they pursued a similar strategy.\(^7\)

In an effort to minimize the harm resulting from this multi-forum litigation, Sprint negotiated a “Forbearance Agreement” in which the parties promised to limit their claims to the jurisdictions in which their respective lawsuits were currently pending and to coordinate discovery in the parallel suits in order to reduce costs.\(^8\) In addition, the parties amended their existing agreements to include a choice-of-forum provision.\(^9\) With its less adversarial affiliates, Sprint negotiated exclusive choice-of-forum provisions that would limit its exposure in the future.\(^10\) However, notwithstanding these attempts, the subsequent proceedings were so complex and costly that Sprint Nextel ultimately resolved the lawsuits by buying eight out of its ten affiliates. The largest of these transactions was the $4.3-billion acquisition of Alamosa Holdings in February 2006.\(^11\)

The Sprint-Nextel merger provides a particularly striking example of the profound negative consequences that it can have to leave important terms in a contract unspecified. And yet, contractual gaps such as these are no exception in even the highest-value transactions between the most

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\(^6\) iPCS Wireless, Inc. v. Sprint Corp., No. 05 CH 11792 (Order) (Ill.Cir.Ct. Dec. 28, 2005); The complaint is available at https://www.sec.gov/Archives/edgar/data/1108727/000110465909054272/a09-26086_1ex99d2.htm.

\(^7\) See Sprint Nextel Corp. v. iPCS, Inc., No. CIV.A. 3746-VCP, 2008 WL 2737409 (Del. Ch. July 14, 2008). While documents relating to the proceedings in Illinois are not publicly available, the Delaware decision discusses the parallel suits extensively.

\(^8\) Art. III Section 3.1, Sprint/IPCs Forbearance Agreement, July 28, 2005 (available at https://www.sec.gov/Archives/edgar/data/101830/000119312505152289/dex991.htm).


\(^10\) For one example, see https://www.sec.gov/Archives/edgar/data/354963/000116923207001444/d71238_10-31.htm.

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sophisticated actors. For instance, choice-of-forum provisions are similarly absent in the May 2011 underwriting agreement between Merrill Lynch, (represented by Cahill Gordon & Reindel LLP) and Celanese Corp. for $140 million;\(^\text{12}\) or the November 2015 common unit purchase Agreement between Sunoco (represented by Latham & Watkins) and Energy Transfer Equity for $70 million.\(^\text{13}\) Indeed, a systematic study of half a million “material” contracts reported to the SEC between 2000 and 2016 reveals that forum selection clauses are absent in more than half of all agreements.\(^\text{14}\)

To students of contract law, this variation in the adoption of choice-of-forum provisions presents an intriguing puzzle. We currently lack any theory that would predict parties to prefer the uncertainties associated with not having a forum selection clause over the predictability that comes with choosing a litigation forum \textit{ex ante}. And even if we could conceive of such a theory \textit{ex post facto}, it would need to explain not only the existence of contractual gaps with respect to the forum, but also the great variation between different contracts. It is difficult to find consistency in the use of choice-of-forum provisions across any coherent dimension that is often thought of to induce homogeneity, such as the type of the underlying transaction or the industry. Indeed, even multiple contracts of the same company vary widely in their use of choice-of-forum provisions, such that any given company sometimes includes them and sometimes does not.\(^\text{15}\)

But if it is neither the identity of the party nor the characteristics of the deal, what does explain the observed variation in contractual terms? To get an anecdotal taste of the empirical argument advanced in this Article, consider the case of Huron Consulting Group Inc. (“Huron”), a leading provider of financial services. On July 31, 2007, Huron announced the acquisition of Callaway Partners, LLC (“Callaway”). Callaway specializes in finance and accounting project management. The purchase price was $60 million, paid in cash.\(^\text{16}\) Then, on January 4, 2007, Huron acquired Wellspring

\(^{12}\) The contract can be found at https://www.sec.gov/Archives/edgar/data/1306830/000095012311046746/d82124exv10w1.htm.

\(^{13}\) The contract is available at https://www.sec.gov/Archives/edgar/data/1552275/000119312515377829/d88455dex102.htm.


\(^{15}\) See infra, Figure 2.

Partners LTD for $65 million. On the same day, Huron also acquired Glass & Associates, Inc., a leading turnaround and restructuring firm, for $30 million. What is striking about these acquisitions is that, while the underlying contracts for all of them include a choice-of-law clause specifying the “internal laws of the State of Illinois” as the governing law, none of them include a choice-of-forum provision.

In searching for consistency among all three transactions that may help explain the absence of choice-of-forum provisions, a glance at the underlying agreements as filed with the SEC is instructive. What can be noticed is that all three contracts use the same font, format and have similarly titled provisions. For instance, the substantive choice-of-law provision in all three contracts is titled “Applicable Law,” which is a rarity among these agreements. Indeed, the three agreements look like almost identical copies of one another. A study of the notice clause reveals who has written these contracts. All acquired parties were represented by different sophisticated and successful law firms, namely Epstein, Becker & Green, P.C., Kirkpatrick & Lockhart Nicholson Graham LLP and McDermott Will & Emery LLP. At the same time, what all three agreements have in common is the counsel representing Huron, an experienced partner of the firm Mayer, Brown, Rowe & Maw LLP. Together, this suggests that all agreements were written based on the same template, provided by the acquirer’s counsel. This template, in turn, did not include a choice-of-forum provision, and so did none of agreements supporting the acquisitions.

At its core, this Article is a systematic and comprehensive investigation as exemplified with the case of Huron. It shows that the decision whether or not to include a choice-of-forum provision is not typically made in an effort to maximize the joint surplus of the agreement. Instead, the presence of these clauses is almost exclusively driven by the lawyers that are hired to draft the contract between the parties. And even though most of the transactions under

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19 Huron is headquartered in Chicago, IL.
21 Today known only as “Mayer Brown.”
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Investigation have a value of several million or even billion dollars, the dynamics of the deal seem not to explain the lawyers’ decision to include or not include a forum selection clause. Instead, external counsel relies heavily on templates and whether or not the final contract includes a choice-of-forum provision is determined almost exclusively by the template that a law firm uses.

Exploiting the fact that some law firms collapsed during the period of observation, forcing lawyers to move to different firms and clients to seek new counsel, the Article further demonstrates that there is no evidence to suggest that companies strategically hire law firms that use the most beneficial template for their deals. Similarly, external variation in the default rules on forum choice seem to have no bearing on how parties approach issues of forum selection. Instead, the final contract almost always is identical to the first draft that was provided by one of the law firms. In contrast, the historical practice of the law firm receiving the first draft has no measurable bearing on whether the final contract specifies a forum. This suggests that external counsel virtually never bargains over or adapts choice-of-forum provisions as found in the initial draft.

The results show that sticky drafting practices characterize the most fundamental aspects of commercial transactions across a wide range of contexts. In doing so, they contribute to the literature on the economics of contract design and the role of the legal profession in several important ways.

First, much of modern legal and economic scholarship on contracts assumes that sophisticated parties routinely write optimal agreements. Meanwhile, the popular “Coase Theorem” teaches us that default rules do not matter if transaction costs are negligible, because parties would simply contract around inefficient default rules.22 Together, these assumptions have resulted in a lethargy with respect to both academic, as well as regulatory and judicial interest in analyzing and optimizing the default rules that pertain to transactions between sophisticated commercial actors.23


23 See Ian Ayres & Robert Gertner, Filling Gaps in Incomplete Contracts: An Economic Theory of Default Rules, 99 YALE L.J. 87, 89 (1989) (“Few academics have gone beyond one-sentence theories stipulating that default terms should be set at what the parties would have wanted.”) (internal citations omitted). To be sure, scholars have developed a theoretical framework for how to assess the efficiency of default rules more generally, see, e.g., Charles
The jurisprudence on the default rules of personal jurisdiction are a case in point. Over the past decade, the Supreme Court made important innovations in the legal framework surrounding the choice of forum for claims directed against corporations. However, this jurisprudence was developed almost exclusively in the context of tort law and consumer contracts. At the same time, and consistent with the view that sophisticated actors are able to optimize the rules themselves, the court has done very little to promote clarity in the at times opaque default rules on the choice of forum in contracts disputes at arm’s length. The results of this study lay bare an important practical limitation of theoretical approaches to these traditional accounts of contract design. Default rules such as forum selection clauses can have important welfare implications since they affect not only the distribution, but also the final allocation of the contractual surplus. As such, it is worth spending scholarly, regulatory and judicial attention to the design of efficient default rules even as they pertain to transactions between highly sophisticated actors.

Second, while the recent trend towards more empirical scholarship on contracts resulted in many valuable insights, one can observe a tendency for researchers to infer the efficiency of a clause from its prevalence in contracts between commercial actors. For instance, a desire to explain a seemingly incoherent set of contract terms has led to increasingly complex theoretical models explaining the interplay between formal and relational contracts.

Only few have taken into consideration that the nuanced provisions in these contracts may not be optimized. The results of this study suggest that it may


For a detailed discussion, see infra, notes 139—149 and accompanying text.

See infra, notes 183—184 and accompanying text.


Matthew Jennejohn, Disrupting Relational Contracts 42 (Feb. 18, 2018) (unpublished
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be suitable to exert caution more frequently, thus determining efficiency on its own terms rather than to infer it from observed practice.

Third, this study adds to and expands on the growing body of literature that emphasizes the significance of the law firm’s role in the allocation of contractual rights. Prior research has found that the law firm is an important actor in explaining the design of pari passu clauses in sovereign bond agreements; the prevalence of arbitration provisions in these contracts; exclusive forum provisions in corporate charters and bylaws; takeover defenses; and the language of S-1 statements filed in the course of initial or secondary public offerings. However, law firms do not seem to matter for the formulation of event risk covenants in corporate bonds when controlling for the underwriter. This study is the first to investigate the influence of the law firm in a wide array of contractual relationships at arm’s length, overcoming the problem of a lack of generalizability that affects previous contributions. It is also the first study to compare the law firm’s influence to that of the company by considering another important legal actor, the general counsel.

Finally, heterogeneity in contractual drafting practices suggests an important domain in which legal education can be value enhancing. In particular, by raising awareness of and advising their students on the pitfalls of template-driven contract drafting, law schools can enable their students to significantly improve the distribution of contractual rights in favor of their clients.

manuscript, on file with the author) (controlling for the two most important law firms in an analysis of contractual relationships for pharmaceutical alliances).


33 Marcel Kahan & Michael Klausner, Standardization and Innovation in Corporate Contracting (or “The Economics of Boilerplate”), 83 VA. L. REV. 713, 753 (1997) (finding that law firms exert no measurable influence on the language in event risk covenants).
The article proceeds in eight parts. The first section offers a brief primer on the laws surrounding forum choice and forum selection clauses. Section II describes two theoretical approaches to the study of contract design and develops competing predictions on how contracts should be drafted. Section III introduces the data set and presents summary statistics. Section IV investigates whether the contracts in the data set reflect law firm or company preferences. Section V asks whether law firms ever bargain over the issue of forum choice. Section VI analyzes how resistant law firm templates are to changing circumstances in the legal environment. Section VII discusses limitations and the implications of the findings for the study and design of contracts. A last section concludes.

I. A BRIEF PRIMER ON FORUM CHOICE

In order for a court to exercise authority in a case, it requires personal jurisdiction over the defendant. Personal jurisdiction is established either by law or by voluntary submission of the defendant. Through the use of forum selection clauses (or “choice-of-forum clauses”), parties can opt to submit to a particular court’s jurisdiction ex ante, i.e. before the dispute arises. Forum selection clauses can be narrow in scope, such that they pertain to a limited subset of contractual claims. In contrast, broad clauses affect all disputes arising out of the contractual relationship between the parties and may even encompass tort and statutory claims. 34

Choice-of-forum provisions can be either permissive or exclusive. A permissive clause bars the defendant from challenging a court’s jurisdiction. However, the plaintiff may still pursue litigation in a forum other than the one specified in the clause. Permissive choice-of-forum clauses are thus strictly beneficial to the plaintiff. In contrast, exclusive choice-of-forum provisions not only bar the defendant from challenging a court’s personal jurisdiction, but also allow her to transfer any dispute to the court that is specified in the provision. As such, exclusive choice-of-forum clauses are both enabling and disabling to the plaintiff.

34 Clauses that cover tort and statutory claims often use broad language. Typically, these clauses refer to the courts any dispute “arising out of the relationship” of the parties, are “related to”, “in regards to” or “in connection with” their transaction. See, e.g., Manetti-Farrow, Inc. v. Gucci Am., Inc., 858 F.2d 509, 514 (9th Cir. 1988) (holding that disputes “regarding interpretation or fulfillment” of the contract encompasses torts claims). Some courts have a tendency to interpret all forum selection clauses broadly, see TriState HVAC Equip., LLP v. Big Belly Solar, Inc., 752 F. Supp. 2d 517, 536 (E.D. Pa. 2010) (“courts have generally held that a forum-selection clause applies to tort and other non-contract claims that require interpretation of the contract or otherwise implicate the contract's terms.”).
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In addition to choosing the court that hears their case, parties also have the option to refer disputes to private arbitration. In principal, arbitration allows parties to customize procedural rules with great flexibility. In practice, however, many parties opt for commoditized, structured arbitral proceedings as they are offered by a few large arbitral organizations, such as the American Arbitration Association or JAMS. Parties can also choose to submit some claims to courts, while leaving others to arbitration. For instance, in M&A contracts, disputes surrounding the adjustment of the purchase price due to a change in the value of the acquired company are often subjected to the evaluation of a private expert, such as an independent accounting firm. To avoid confusion, it should be noted that this Article uses the term “forum selection clause” or “choice-of-forum provision” to refer to the collective of both clauses referring parties to courts, as well as those referring them to arbitration.

If the parties leave the forum unspecified, the default rules determine whether a court has personal jurisdiction over the defendant. Under complete diversity, it is possible for both federal and state courts to exert jurisdiction over the defendant. Within each court system, rules by which courts can exert personal jurisdiction in any given dispute are not conclusive and overall lack clarity, especially in the period under study here. Nonetheless, one can try to formulate a few broad principles that apply to company contracts of the type under investigation.

Principally, states have an interest to hold residents and nonresidents accountable if they perform certain acts that have repercussion within the state. This interest has to be balanced against the parties’ interest to not be subjected to litigation in a forum to which she has no relevant “contacts, ties or relations.” This has effectively led to the implementation of a test by which states can exert jurisdiction over a defendant if the defendant has “minimum contacts” to the state. The contacts necessary to satisfy the “minimum contacts” requirement vary, based on whether personal jurisdiction is asserted under principles of general or of specific jurisdiction.

35 Parties can also opt for mediation. However, mediation is a consensus-based dispute resolution process that complements, rather than replaces adversarial and binding means of dispute settlement. This article is focused on binding means of dispute resolution and thus does not consider mediation.
36 Nyarko, supra note 14, Table 4 at 13 (finding that 60% of SEC contracts opt for arbitration under the American Arbitration Association, JAMS, the International Chamber of Commerce or the China International Economic and Trade Arbitration Commission).
38 Id.
A court with general jurisdiction over a defendant can hear any case against that defendant, irrespective of the specific cause of action. Courts all over the country have long differed in the level of intensity of the relationship between a company and the state that is sufficient to establish general jurisdiction. The most expansive view is expressed in the “doing business” test. Under that test, it is sufficient for a company to do business “with a fair measure of permanence and continuity” in a state in order for the courts in that state to exert general jurisdiction.  

Specific jurisdiction over a defendant is based on the particular action that gives rise to the claim. To define what constitutes “minimum contacts” with regard to specific jurisdiction, most states have enacted so-called “long-arm statutes.” Typically, these statutes provide that jurisdiction may be asserted by transacting business in a state, contracting to supply products or services within a state or even by failing to perform contractually required acts in a state. Other characteristics that factor into the analysis in contract disputes, though which may not to be independently sufficient, are the place of contract negotiations, place of performance, place in which payments are to be made and the choice-of-law provision.

The Supreme Court has always upheld the validity of long-arm
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statutes,\textsuperscript{46} though its last decision dates back to 1985.\textsuperscript{47} As such, there are few universally applicable guidelines for parties to project the risk of being subjected to litigation in a particular forum and the principles by which personal jurisdiction is established vary significantly.

This uncertainty is further amplified by a tendency of some courts to not cleanly distinguish between the requirements for general and specific jurisdiction in contracts cases. As Charles Rhodes points out, general jurisdiction, if fully embraced by the courts, is “dispute-blind,” such that a breach of contracts claim between a company registered in California and one registered in Pennsylvania could be litigated in Texas simply by virtue of the defendant having substantial business ties in the state, even though the contract has no other relations to Texas.\textsuperscript{48} In practice, however, some courts distinguish between general and specific jurisdiction simply based on the quantity of forum contacts. In these jurisdictions, pursuing a claim arising out of a breach of contract always requires some connection between the contract and the state, even under general jurisdiction. For these reasons, commentators have argued that, in some states, general jurisdiction is merely a “myth,” with courts essentially employing the same analysis as required under specific jurisdiction.\textsuperscript{49}

What can then be taken away from this description of the default rule is that it induces uncertainty to contracting parties with respect to the particular court that will hear their case. In contracts between large public companies, the place of negotiations, place of performance, state of registration, principal place of business etc. all might diverge, potentially opening the parties up to being subjected to litigation in multiple court forums, as exemplified through the Sprint Nextel merger case in the introduction.

II. PARTY PREFERENCES AND STICKINESS

A study of over 3 million federal civil cases between 1979-1991 conducted by Kevin Clermont and Theodore Eisenberg has shown that, on

\textsuperscript{47} Burger King Corp. v. Rudzewicz, 471 U.S. 462 (1985).
average, there is almost one § 1404 (a) (change of venue) motion for each federal civil trial.\textsuperscript{50} The finding suggests that, even within the relatively homogenous federal court system, litigators assign great importance to the question which specific court hears their case. In addition, among all 557,014 relevant contracts cases, the probability for the plaintiff to win was 82\% if the case was not transferred through a change of venue motion and the venue thus reflects the preferences of the plaintiff. In contrast, if the case was decided pursuant to a successful § 1404 (a) motion, the venue is more likely to reflect the defendant’s preferences and the probability for the plaintiff to win drops to only 54\%.\textsuperscript{51} Though it is necessary to exert some caution when interpreting this difference,\textsuperscript{52} it may suggest that the litigators’ interest in the choice of forum is well founded, as it can have a profound impact on the outcome of the suit.

In light of this evidence—and uncertainty associated with the default rule—why is it the case that over half of all material contracts submitted to the SEC lack a forum selection clause?

\textsuperscript{50} Kevin Clermont & Theodore Eisenberg, \textit{Exorcising the Evil of Forum-Shopping}, 80 CORNELL L. REV. 1507, 1529 (1995) (estimating about 10,000 transfer motions per year, compared to 11,000 trials).

\textsuperscript{51} I calculate this number based on the contracts cases which are of most relevance to this study, as depicted in their Appendix, p. 1531. After subsetting to all contracts cases, I further drop from the analysis cases from the following subcategories due to their lack of relevance: “Indemnity on Admiralty Cases”, “Recovery of Medicare Overpayments,” “Recovery of Defaulted Student Loans”, “Recovery of Overpayment of Veterans Benefits,” “Hospital Care Act” and “Contract Product Liability.” However, the results are similarly striking when considering all 834,667 contracts cases (89\% vs. 57\%).

\textsuperscript{52} Only a small fraction of cases goes to judgment, making it possible that selection effects through settlement rates explain some of the observed differences. For instance, it is possible that plaintiffs with a weak case are more likely to try their luck and shop for extravagant forums, only to be subjected to a successful motion of venue transfer, whereas plaintiffs with a strong case have fewer incentives to shop for forums with a low probability to deny venue transfer. This would mean that the true effect of the forum may be smaller than a simple comparison may suggest. At the same time, there are also reasons to assume that the true and full effect of forum choice on substantive outcomes may be larger. After all, a venue transfer under § 1404 (a) is the “mildest” form of forum shopping that parties can engage in. That is because district courts all apply the same procedural law, leading to some homogeneity between the different venues. An omission of a forum selection clause potentially allows plaintiffs to select not only between different courts of the federal system, but also between the state and federal judiciary (assuming complete diversity), as well as between different state courts. It is at least conceivable that the relevance of the forum/venue for the outcome as suggested by Clermont and Eisenberg merely provides a lower bound, and that the omission of a choice-of-forum clause might have even more pronounced consequences in other cases where the parties shop not only within the federal courts, but also between different types of adjudicatory systems.
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Traditional contract theory assumes that sophisticated actors routinely write optimized agreements and that the presence or absence of a clause is primarily driven by the costs and benefits conferred upon the parties, a view that is also held by the courts. Indeed, some commentators even argue that a belief in the ability of parties to maximize the contractual surplus is so deeply entrenched in the mindset of judges it would be able to explain the vast majority of judicial reasoning and jurisprudence in contract law.

At the same time, the literature on forum selection clauses has not produced a theory which predicts parties not to include choice-of-forum provisions in their contracts. Instead, it is assumed that the cost-benefit calculus necessarily comes out in favor of inclusion, with the only remaining question being the type of clause that should be included. For instance, scholars have asked whether and under what circumstances parties prefer arbitration over courts and how parties should design efficient procedural


54 In discussing the importance of a forum selection clause between two commercial actors, with one party alleging that the forum selection clause was boilerplate language that the parties did not reflect upon, Justice Burger contends: “(...) [I]t would be unrealistic to think that the parties did not conduct their negotiations, including fixing the monetary terms, with the consequences of the forum clause figuring prominently in their calculations.” M/S Bremen v. Zapata Off-Shore Co., 407 U.S. 1, 14 (1972). Similarly, Judge Posner has described it as “(at best) paternalistic” and “odd” for a court to question the validity of a penalty clause that sophisticated parties have included in a contract, presuming that it has been bargained for. Lake River Corp. v. Carborundum Co., 769 F.2d 1284, 1289 (7th Cir. 1985).

55 Jody Kraus & Robert Scott, The Joint Maximization Theory of American Contract Law, 4 (Oct. 11, 2018) (unpublished manuscript, on file with the author) (arguing that “virtually all of the American common law of contracts can be derived from two premises: the purpose of contract law is to enforce the parties’ intent, and most parties intend to maximize the joint value of their contracts at the time they form them. These foundational premises serve as the cornerstone of a genuine interpretive theory of American contract law.”). But see, e.g., STEPHEN A. SMITH, CONTRACT THEORY 31 (2004) (arguing that utilitarian considerations are orthogonal to legal reasoning); Ronald M. Dworkin, Is Wealth a Value?, 9 J. LEGAL STUD. 191, 191 (1980) (claiming that the “normative limb” of joint value maximization calls into question its descriptive accuracy).

rules. In order to establish a baseline rate of forum selection clause usage under the null hypothesis that stickiness plays no role in contract drafting, it is worth revisiting the assumption of universal desirability by examining the potential costs and benefits of including a forum selection clause.

A. Forum Selection Clauses: The Benefits

Decreased Litigation Costs

Perhaps the most obvious benefit resulting from the inclusion of a choice-of-forum provision are decreased litigation costs. As mentioned above, litigators perceive the forum as an important determinant for the outcome of the dispute and are willing to fight over it fiercely. Litigation over where to litigate can cost the parties significant time and resources in the form of lawyer fees. In addition, these disputes can have substantial indirect costs, as exemplified by the case of the Sprint Nextel merger, where multi-forum litigation increased the uncertainty surrounding the legality of the merger, forcing Sprint to buy out most of its affiliates.

Efficient Performance

Including a choice-of-forum provision can further incentivize the parties’ efficient performance with the contractual terms. In the Appendix, I formally develop this argument by introducing an extension to a standard choice-of-forum model by Steven Shavell, Christopher Drahozal and Keith Hylton. To develop a non-formal intuition for this result, consider that the parties’ incentive to breach a contract is related to the costs they face for the breach. These costs generally come in the form of dispute settlement expenses and damages awarded by the court. A party contemplating a breach of contract may be deterred if it predicts that its breach will subsequently be

57 See, e.g., Robert E. Scott & George G. Triantis, Anticipating Litigation in Contract Design, 115 YALE LJ 814, 856 (2005) (discussing the implications that future litigation has on the optimal design of contracts); Bone, supra note 56 (providing a holistic theoretical framework in which to consider the costs and benefits of procedural customization rooted in a utilitarian framework); Daphna Kapeliuk & Alon Klement, Changing the Litigation Game: An Ex Ante Perspective on Contractualized Procedures, 91 TEX. L. REV. 1475, 1483 (2012).
58 Infra notes 50–52 and accompanying text.
59 Shavell, supra note 56.
60 Shavell, supra note 56.
61 Keith N. Hylton, Agreements to Waive or to Arbitrate Legal Claims: An Economic Analysis, 8 THE SUPREME COURT ECONOMIC REVIEW 209 (2000); Christopher R. Drahozal & Keith N. Hylton, The Economics of Litigation and Arbitration: An Application to Franchise Contracts, 32 J. LEGAL STUD. 549 (2003). See also Dodge, supra note 56.
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litigated in a jurisdiction in which litigation is cheap\textsuperscript{62} and damage awards are high.

Both expected dispute settlement expenses and damages vary from one jurisdiction to the other. This is certainly true for the difference in expenses between litigation and arbitration, provided that only in arbitration, parties bear the full costs of their disputes. Indeed, studies indicate that about 20% of the total costs of complex arbitral proceedings are paid to the arbitration institution and the arbitrators.\textsuperscript{63} In the domestic court system, this amount is largely subsidized by the public. But even within forums of a particular type, costs can vary substantially. For example, most corporate legal firms have a significant presence in and familiarity with the courts of New York, lowering the costs for disputes litigated in the state, compared to litigation in a state corporate lawyers are much less familiar with. Further, different states have different procedural laws which in turn alter their costs. For example, it is well known that civil jury trials on average take twice as long as bench trials,\textsuperscript{64} but that not all states enforce jury waiver clauses, potentially exposing parties to longer and more costly litigation.\textsuperscript{65} In addition to dispute settlement costs, damage awards can also vary with the forum of choice. Again, the most significant difference exists between courts and arbitration, where some evidence suggests that arbitrators might be susceptible to granting awards that ‘split the baby’ in order to maximize their chances of reappointment.\textsuperscript{66} Even within the domestic judiciary, awarded damages can

\begin{footnotesize}
\begin{itemize}
\item \textsuperscript{62} It does not have to be cheap in a monetary sense. For instance, a jurisdiction in which courts have a small docket of pending cases may also be attractive for plaintiffs.
\item \textsuperscript{63} For survey data, see Doug Jones & Humphrey Lloyd, \textit{Techniques for Controlling Time and Costs in Arbitration}, Survey 843 (Chartered Institute of Arbitrators 2011). \textit{See also} Peter M. Wolrich, \textit{CI Arb Costs of International Arbitration Survey}, Survey 843 (International Chamber of Commerce Commission on Arbitration 2011).
\item \textsuperscript{65} In North Carolina, jury waiver clauses are unenforceable by statute, see N.C. Gen. Stat. §22B-10. California as well as Georgia courts often hold them unconscionable as a matter of common law, see Grafton Partners, L.P. v. Superior Court, 116 P. 3d 479 (2005); 264 Ga. 339, 444 S.E.2d 799 (1994). Even those states that enforce jury waivers often invoke a presumption against the enforceability of a waiver, limiting enforcement to those clauses that are narrowly construed. \textit{See Posner, The Law and Economics of Contract Interpretation, supra} note 53. Note that, generally, the validity of a jury waiver clause is a procedural question that is to be decided under procedural rules. However, the 9th Circuit has held that, where state law is more protective of jury waivers, federal courts may import the standard of the substantive state law that governs the contract. \textit{See In re County of Orange, No. 14-72343} (9th Cir. April 16, 2015).
\item \textsuperscript{66} \textit{See} Henry S. Farber \& Max Bazerman, \textit{The General Basis of Arbitrator Behavior: An Empirical Analysis of Conventional and Final-Offer Arbitration}, Working Paper 1488
\end{itemize}
\end{footnotesize}
vary, e.g. due to differences in the pool of juries or judges.67

Parties that choose their forum have the possibility to optimize the incentives provided in order to guarantee that a contract is only breached if it is efficient to do so. Parties that do not agree on a forum forego this possibility, allowing plaintiffs to unilaterally choose forums that are particularly favorable to their claim. Whether the expected dispute settlement expenses and damages awarded in the jurisdiction chosen by the plaintiff unilaterally exceed those awarded by the court that is chosen ex ante by mutual agreement cannot be determined generally. On one hand, it is evident that the plaintiff will have an interest to choose a forum that is particularly favorable to her claims. On the other hand, not choosing the forum ex ante significantly diminishes the set of jurisdictions that the plaintiff can sue in absent consent by the defendant, such that the plaintiff’s options are severely limited. However, what should be noted is that only in exceptional circumstances will the plaintiff’s choice of jurisdiction provide efficient incentives to the defendant. In all other cases, the defendant may be over- or underdeterred, leading to an expected welfare loss for the contractual parties.

Aligning Forum and Substantive Law

Lastly, benefits are conferred on parties who align the substantive law governing the contract with the courts that will hear their disputes. As Thomas McClendon notes, courts have a competitive advantage in deciding their own state law that stems from their familiarity with the applicable rules.68 That divergences between the choice-of-law and choice-of-forum are undesirable is further supported both by the data presented here, as well as by interviews conducted with transactional attorneys. As Table 4 below demonstrates, contracts that specify both a governing law and a court forum hardly ever create a dispute resolution process in which courts apply a law from another state. In addition, interviews have shown that aligning the substantive law and forum are among the primary considerations governing the drafters’ choice between different forums.69 However, if parties do not

67 Drahozal & Hylton, supra note 61.
69 Matthew D. Cain & Steven M. Davidoff, Delaware’s Competitive Reach, 9 JOURNAL OF EMPIRICAL LEGAL STUDIES 92, 98 (2012) (“In terms of driving factors for the choice of forum decision, choice of law is often viewed by attorneys as being the most important. This
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specify a forum, the chance for the substantive law to differ from the forum increases significantly, making the outcome less predictable and potentially longer due to the unfamiliarity of the judges. Again, Sprint Nextel provides an illustrative case, where a Delaware court applied the substantive law of Pennsylvania, further amplifying the complexities of the dispute.\textsuperscript{70}

\textit{B. Forum Selection Clauses: The Costs}

\textit{Negotiation and Drafting Costs}

Perhaps the most evident costs associated with the inclusion of choice-of-forum provisions are the costs of negotiations and drafting. Since the forum can have a significant impact on the outcome of a potential dispute, it is possible that any attempt for one party to include its preferred forum would be met by fierce opposition. It might then be best for the parties to leave the forum unspecified in hopes that a dispute does not occur between them. And even if parties can agree on a preferred forum, provisions still have to be drafted. Drafting could cost the parties significant resources, even though those can be mitigated through the inclusion of boilerplate language.

However, while comprehensive data on negotiation and drafting costs does not exist, available evidence suggests these costs to be negligible. In particular, a 2013 Survey of general counsel in the Public Utility, Communications and Transportations Industries (PUCAT) conducted by the American Bar Association suggests that parties typically spend less than one hour negotiating and drafting choice-of-forum provisions in “significant commercial contracts,” implying that their direct costs do not exceed $5,000.\textsuperscript{71} This is consistent with other survey evidence in which drafters describe forum selection provisions as “2am clauses” that are included without much negotiations after the substantive terms of the contract have


\textsuperscript{71} 59\% of respondents said that their company allots less than one hour on the negotiation of dispute resolution clauses and 82\% spends less than four hours. John J. Range, \textit{Fall 2014 Report of the Alternative Dispute Resolution Committee on Its ADR Survey of Companies in PUCAT Industries} 8 (American Bar Association, Chartered Institute of Arbitrators 2014). Even if the most senior partners were to negotiate forum selection clauses, their costs would not exceed $5,000 per company. This assumes an hourly rate of $1,500, see http://www.abajournal.com/news/article/top_partnerBilling_rates_at_biglaw_firms_nudge_1500_per_hour.
been determined.\footnote{Paul Friedland \& Loukas Mistelis, \textit{International Arbitration Survey: Choices in International Arbitration}, Survey (Queen Mary University of London and White \& Case LLP 2010). Drafters with whom I discussed the results of this study similarly suggested that choice-of-forum provisions are not fiercely negotiated over.}

\textit{Negative Signaling}

Another potential cost associated with the inclusion of choice-of-forum provisions is negative signaling. Because a contractual gap raises the \textit{ex post} costs of dispute settlement, those who bring up the issue of forum choice during contract negotiations could convey to the other side that there is a significant probability for a dispute to arise. Conversely, not specifying the forum \textit{ex ante} may indicate trustworthiness and provide assurances that any dispute can be solved amicably between the parties.\footnote{See, e.g., Robert H. Gertner \& Geoffrey P. Miller, \textit{Settlement Escrows}, 24 J. LEGAL STUD. 87, 119 (1995) (“[B]ringing up dispute resolution procedures when negotiating a contract may be a signal (…) of the likelihood that a claim will arise through breach of contract.”). \textit{See also} Omri Ben-Shahar \& John A.E. Pottow, \textit{On the Stickiness of Default Rules}, 33 FLA. ST. U. L. REV. 651, 652 (2005) (proposing that deviating from a contractual template may signal information that negatively affects the deviating party).}

This argument, however, is only somewhat plausible in the context of choice-of-forum provisions. As mentioned above, these provisions do not have to be exclusive, but can also be non-exclusive. Non-exclusive forum selection clauses are strictly beneficial to the potential plaintiff, as they extend the set of jurisdictions she can sue in. Hence, rather than leaving the forum unspecified, a contractual partner seeking to indicate trustworthiness has an incentive to include non-exclusive choice-of-forum provisions that confer personal jurisdiction on courts that are particularly unfavorable to her claims. In addition, one of the central functions of contracts is to allocate risks and contingencies between the parties. It is thus true that virtually any provision in a contract conveys some form of private information. However, we see much less heterogeneity in some of these other terms. For instance, most contracts include a governing law clause, even though specifying the substantive law governing the contract may have stronger implications for the parties’ future behavior than forum choice. Lastly, in interviews I conducted in the context of this study, both senior drafters and general counsel have described signaling costs as an “academic” concern that bears no relevance in practice.

\textit{Relational Contracting}
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It has been argued that some dimensions of contractual relationships should remain informal, since formalizing them damages the relationship between the parties.\textsuperscript{74} For instance, based on interviews with 68 businessmen and lawyers, Stewart Macaulay notes that “[d]isputes are frequently settled without reference to the contract (…). There is a hesitancy to speak of legal rights or to threaten to sue in these negotiations.”\textsuperscript{75} If true, it may be the case that those who indicate reliance on dispute settlement mechanisms risk to formalize their relationship and forego the advantages that come with trust. However, again, it is not immediately obvious why a similar argument should not apply to other clauses such as choice-of-law provisions as well.

Uncertainty as a Screening Device

Lastly, commentators have argued that, under specific circumstances, parties may prefer uncertainty in a contract over the certainty of definitive terms and contractual language.\textsuperscript{76} The intuition behind this result is that uncertain terms that spur costly litigation present a form of \textit{ex post screening} that separates claimants with strong claims from those with weak claims, potentially increasing the overall surplus of the contract. In addition, costly litigation may incentivize beneficial renegotiation of the contract. Note that, similar to the benefits conferred through efficient performance, this argument does not presuppose that parties actually litigate. Bargaining in the shadow of costly litigation may be able to increase the contractual surplus without the parties ever going to court.\textsuperscript{77}


\textsuperscript{77} \textit{See, e.g.}, Choi & Triantis, \textit{Completing Contracts in the Shadow of Costly Verification}, \textit{supra} note 76, at 519 (describing a contract in which litigation lies off the equilibrium path).
One may be inclined to argue that this rationale provides another reason for why parties omit a choice-of-forum provision. After all, it was pointed out above that the uncertainty associated with leaving the forum unspecified can spur litigation over where to litigate. If high litigation costs are indeed desirable, then omitting a choice-of-forum provision may further parties’ interests by increasing litigation costs. However, the flexibility granted to parties in designing their choice-of-forum provisions makes this argument only partially compelling. Assume, for instance, that the default rules allow parties to litigate New York and that litigating in New York is cheap because both parties are incorporated and conduct their business in the state. If the goal is to increase litigation costs in order to deter weak claims and promote renegotiation, the parties could simply opt for the exclusive jurisdiction of another, less competent, more costly and geographically more distant jurisdiction. Indeed, only if we assume that the expected costs of omitting the choice-of-forum provision exceed those of litigating in the most expensive jurisdiction, it may be conceivable that parties’ optimal strategy is to not include any forum selection clause at all.

**The Bottom Line**

Overall, including a choice-of-forum provision may create a number of different costs and benefits. While in most instances, it is reasonable to assume that parties would want to specify the forum *ex ante*, it is at least plausible that under some particular circumstances, a cost-benefit-calculation suggests that the costs of inclusion outweigh the benefits. Hence, even under the baseline assumption that choice-of-forum provisions perfectly reflect party preferences, we may observe some heterogeneity in their adoption.

**C. Law Firms and Contractual Stickiness**

Traditional theory, and with it the preceding discussion, views contractual parties as unitary actors and the costs and benefits to these unitary actors as determinative for contractual design. But more recently, this view has been challenged by a group of legal scholars. Through a series of empirical studies focusing primarily on covenants in corporate and sovereign bonds, they show that many high-value contracts are not merely a reflection of the costs and benefits conferred upon the parties. Instead, they argue that the contractual

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78 See, e.g., Coates, *supra* note 31; Gulati & Scott, *supra* note 28; Romano & Sanga, *supra* note 30. These authors are not the first to highlight the existence of seemingly suboptimal contractual terms. However, in contrast to the more recent contributions, scholars in the 1990s believed that suboptimality could generally be explained through the economics of networks and learning. See in particular William A. Klein et al., *The Call Provision of*
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drafting process is “sticky.”

At its most fundamental level, “stickiness” simply describes path dependence. That is, whether or not a certain provision is included in the contract depends on whether said provision has been included in previous agreements. Note that some level of path dependence is perfectly consistent with traditional theory. After all, negotiating each term in an agreement can impose high transaction costs, so parties might benefit from using standardized (or “boilerplate”) agreements. However, where the stickiness literature goes beyond traditional theory is in its consideration of the relevant actor inducing the standardization.

In particular, the relevant literature relaxes the assumption of contractual parties as unitary actors. It argues that that the provisions in the agreements are based on templates used by the drafting law firms. These law firms would generally be resistant to making changes to their templates, even if it was for the good of their client. The unwillingness to amend their templates would then lead to a particularly profound path dependence that could lock parties into suboptimal agreements for extended periods of time.

Several rationales have been proposed that may help explain this resistance. Some argue that increased economic pressure to commoditize legal services leads to standardization and that it is economically infeasible to deviate from these templates. Others suggest that lawyers may be risk

*Corporate Bonds: A Standard Form in Need of Change,* 18 J. CORP. L. 653 (1993) (finding that a complex call provision capable of optimizing incentives and bond prices in corporate bond indentures is foregone in favor of a simpler rule that tends to overprice the embedded call option); Marcel Kahan, *Anti-Dilution Provisions in Convertible Securities Features,* 2 STAN. J.L. BUS. & FIN. 147 (1995) (suggesting that anti-dilution provisions often employ boilerplate language that insufficiently protects holders of convertible securities who have the right to change their investment into a common stock); Kahan & Klausner, *supra* note 33 (finding that event risk covenants in investment-grade bond indentures provide suboptimal compensation to bond holders in the event of takeovers).

79 See, e.g., Kahan & Klausner, *supra* note 33, at 719 (discussing the benefits of boilerplate language to sophisticated actors).

80 Including not only traditional arms-length contracts, but also bond indentures and corporate charters.

81 Coates, *supra* note 31, at 1303 (“[M]any [corporate lawyers] appear to be making choices, and mistakes, without determining whether such choices are in the long-term interests of their clients[].”)

82 See generally Choi et al., *The Black Hole Problem in Commercial Boilerplate,* *supra* note 28

83 Barak Richman, *Contracts Meet Henry Ford,* 40 HOFSTRA L. REV. 77, 79 (2011) (“[I]f we apply apply [the literature on organizational economics] to the large law firm, we will conclude that the creation of mass-produced goods that do not ideally meet consumer
averse and afraid of the unknown scenarios that may unfold if the templates are tempered with, ultimately leading to a status quo bias. Yet others suggest that lawyers simply make routine cognitive errors and do not know or overlook mistakes in their drafts. Sometimes, contract terms may also be “skeumorphs” that lose their meaning over time, while continuously being used without much reflection, a phenomenon referred to as the “Black Hole Problem.”

What all of these explanations have in common is the conclusion that lawyers draft agreements that do not achieve an optimal allocation of the contractual surplus.

A few empirical studies have provided convincing evidence to support this hypothesis. However, currently, certain limitations prevent the “stickiness” literature from growing into an essential part of contract theory.

First, the findings from previous studies are not necessarily generalizable. The majority of past inquiries focuses on corporate charters and bylaws, as well as publicly issued corporate and sovereign bonds. However, neither of these documents are the result of a traditional bargaining process at arm's-length that characterizes most commercial relationship. Charters and bylaws, though arguably susceptible to market incentives, are drafted by the
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corporation unilaterally.\textsuperscript{92} Similarly, though both bond issuers and holders can be large and sophisticated financial actors, the bond indentures for publicly issued bonds are rarely the result of a traditional bargaining process. Instead, bond issuers and underwriters cement the indentures while bondholders do not participate directly.\textsuperscript{93} While underwriters have an incentive to create marketable bonds, they are also interested in preserving their relationship with the issuer, who wants to minimize constraints on the companies’ or governments’ future conduct. As such, bond indentures typically start with terms strongly favoring the issuer and amendments are made in favor of bondholders only to the degree necessary to ensure marketability.\textsuperscript{94}

Another aspect that makes bond indentures, specifically for corporate bonds, especially sticky and conclusions drawn from their analysis difficult to generalize is the existence of several model indentures which are widely used across the industry. The American Bar Association has published the ABF Model Debenture Indentures (1965), the ABA Model Simplified Indenture (1983, revised in 2000) and the Model Negotiated Covenants and Related Definitions (2006). It is believed that the model indentures provide a widely used template across the industry,\textsuperscript{95} again increasing the probability for sticky covenants to evolve. In contrast, the vast majority of contracts does not evolve out of an industry-wide model agreement, making results of the contracts under study here more representative and generalizable.

It should also be mentioned that studying bond indentures means studying

\textsuperscript{92} To be sure, there is disagreement on the amount of influence shareholder preferences have over the provisions in the corporate charter. See, e.g., Bernard S. Black, \textit{Is Corporate Law Trivial: A Political and Economic Analysis}, 84 Nw. U. L. REV. 542, 549 (1989) (summarizing different academic views). Amendments to the charter may be somewhat more directly influenced by other stakeholders, see James A. Brickley et al., \textit{Corporate Voting: Evidence from Charter Amendment Proposals}, 1 JOURNAL OF CORPORATE FINANCE 5 (1994) (finding evidence that shareholder involvement through voting on charter amendments is a moderately disciplinary tool).

\textsuperscript{93} Metro. Life Ins. Co. v. RJR Nabisco, Inc., 716 F. Supp. 1504, 1509 (S.D.N.Y. 1989) ("[T]he holders of public bond issues (...) often enter the market after the indentures have been negotiated and memorialized. Thus, those indentures are often not the product of face-to-face negotiations between the ultimate holders and the issuing company. ... [U]nderwriters ordinarily negotiate the terms of the indentures with the issuers.").


\textsuperscript{95} "The 1983 MSI and the 1983 Notes were promulgated with the hope that having a common form for the most standard provisions of indentures would reduce the need for significant negotiation of such provisions, and, in large part, the 1983 MSI accomplished that objective.", Revised Model Simplified Indenture, 55 Bus. Law. 1115 (2000).
one of “the most involved financial document[s] that has been devised.”\textsuperscript{96} The covenants which are the subject of previous studies typically deal with complex issues that do not only require knowledge of the relevant legal rules, but also a significant level of expertise in the relevant financial market dynamics and incentive effects.\textsuperscript{97} The impenetrability of the underlying legal issues makes it especially likely for suboptimal rules favoring the issuer to emerge, given that most investors neither fully process, nor have an incentive to invest in identifying how each covenant may affect their return or the default risk.

The lack of a traditional bargaining process, the existence of widely used templates and the high degree of complexity raise questions as to whether the stickiness of contract provisions is an odd feature characterizing a small subset of particularly complex and standardized agreements or whether law firm templates are an important determinant in explaining the resource allocation resulting from commercial contracts more generally.

This study addresses many of these limitations by examining whether the stickiness hypothesis is able to explain the rarity of and variance in the use of choice-of-forum provisions. By analyzing a broad range of corporate agreements across multiple issue areas, it provides a picture of how contracts are written outside of the area of bond issuances, allowing to test whether rigidity is a characteristic of contract provisions more generally or whether it is specific to certain issue areas. In addition, choice-of-forum clauses lie at the core of legal expertise and touch upon an issue that is comparatively simple to comprehend and taught in every first-year law school curriculum. Hence, finding path-dependence in forum selection clause prevalence would make for an especially compelling case of stickiness in contract drafting.

Another advantage of this study is that the analysis of contractual gaps significantly reduces the number of potential explanations for observing stickiness. Previous studies focused on the wording of a covenant and how it relates to the presumed goal of the indenture, concluding that commercial actors are incapable of optimizing the wording of a clause. But choosing the optimum wording of contractual language is a choice from a space with virtually infinite alternatives. Trying to find the optimum choice among a great number of alternatives in such a setting quickly becomes economically infeasible, incentivizing actors to settle for contract terms that are good

\textsuperscript{96} \textsc{Joseph C. Kennedy, Corporate Trust Administration and Management} 1 (2d ed. 1961).

\textsuperscript{97} Klein et al., \textit{supra} note 78, at 657 (demonstrating the value of economic reasoning in the analysis of bond covenants).
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enough to achieve their goal without the need to optimize the text, a decision-making process also known as "satisficing." In contrast, this study focuses not on the optimal wording of the clause, but on its inclusion. The concept of satisficing is an unsuitable explanation for the existence of gaps, as parties should have clearly defined preferences over the inclusion or non-inclusion of a clause.

Theoretical notions invoked by scholars in the 1990s to explain a suboptimal allocation of the contractual surplus are similarly unsuitable explanations for the existence of contractual gaps. For instance, it has previously been proposed that sticky drafting practices can be explained through the economics of networks and learning. By this account, because the benefits of standard clauses are often conferred only after they have been widely adopted in the future, companies are faced with a collective action problem that would cause them to choose a standard that is suboptimal from a social welfare perspective. Further, once a firm has accrued expertise and network benefits, switching would become prohibitively costly. Both of these rationales seem unlikely explanations for observing stickiness with respect to the omission of choice-of-forum provisions. That is because parties who do not include such a clause can neither gradually improve upon it, nor can they feasibly be described as any coherent network. Given that leaving the forum unspecified introduces uncertainty, a line of reasoning which postulates that a fear of the unknown and an extreme level of risk aversion may explain some of the drafters' behavior seems similarly ill-suited as an explanation. Thus, if it can be shown that stickiness characterizes the choice not to include a choice-of-forum provision, this can be seen as compelling evidence in favor of one of the less discussed mechanisms, such as agency costs, cognitive errors or another, yet undeveloped theory.

D. Hypotheses

In this Article, I test the stickiness hypothesis in three steps. First, I examine whether the law firm is a relevant actor in the decision whether or not to include a choice-of-forum provision. I investigate this question by considering the degree to which these clauses vary with external counsel,

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99 Kahan & Klausner, supra note 34.
100 Id., at 730 (describing how learning and network effects can lead to the adoption of suboptimal standards).
101 Id., at 727 (detailing the concept of “switching costs” that could prevent companies to change to a more efficient standard).
102 Supra note 84 and accompanying text.
holding the parties to the agreement (and other observable characteristics) constant. To promote causal interpretability, I also exploit law firm closures as an external shock that forces both companies and drafters to change their law firm.

After establishing that the hiring decision of external counsel significantly influences whether or not parties have a choice-of-forum clause in their agreement, I examine the influence of the law firms’ template on the presence of choice-of-forum provisions. In particular, I identify the law firm that proposed the first draft, as well as the template the draft is based on. With this information in hand, I consider whether or not law firms bargain over the presence / absence of forum selection clauses as found in the template.

Lastly, I consider whether law firms can be induced to make changes to their drafting practice with respect to choice-of-forum provisions in response to external shocks that change the costs and benefits of including the clause. To that end, I exploit the fact that a series of Supreme Court decisions significantly altered the default rules on forum choice and investigate whether these decisions changed the ways in which parties implemented forum selection clauses into their agreements.

III. DATA

This Article uses the collection of all “material contracts” filed with the SEC through its electronic filing system EDGAR between 2000 and 2016. The SEC requires registered companies to report every “material contract,” which encompasses “[e]very contract not made in the ordinary course of business which is material to the registrant.” During the period of observation, a company had to register with the SEC if it had made a public offering or had “total assets exceeding $10,000,000 and a class of equity security (...) held (...) by five hundred or more persons.”

103 A more detailed description of this data set and its creation is provided in Nyarko, supra note 14.
105 See Securities Exchange Act § 12(g). Note that the act has been amended on May 10, 2016, in order to implement Title V and Title VI of the Jumpstart Our Business Startups Act and Title LXXV of the Fixing America’s Surface Transportation Act. It now requires total assets exceeding $10,000,000 and a class of equity security held by either (i) 2,000 persons, or (ii) 500 persons who are not accredited investors. See Securities Exchange Act § 12(g) (May 10, 2016).
Companies attach the agreements to their annual reports (Form 10-K), quarterly reports (Form 10-Q) and to reports filed due to important events and changes between quarterly reports (Form 8-K). Similar provisions exist for foreign companies, who have the option to report using Forms 20-F and 6-K. In addition, during mergers, the relevant contracts are reported as exhibits to Form S-4. I automatically collect all of these reported agreements from all registered companies through the SEC Electronic Data Gathering, Analysis, and Retrieval system (EDGAR). Overall, the data set includes 780,689 agreements between 2000 and 2016. From those, I drop 272,837 duplicates and amendments to existing contracts for a total of 507,852 unique contracts submitted by a total of 18,641 companies.

EDGAR includes data on the party that filed a contract and its industry. I assume the filing party to be the first party to the contract and its industry to be the industry pertaining to the contract. I then write a search algorithm that uses regular expressions to identify the paragraph in the contract that includes the parties to the dispute. The algorithm is described in detail in the Appendix. I scan this paragraph for the mention of any of the 630,106 companies and individuals that have ever disclosed information through filings with the SEC in order to supplement the information on the parties to the contract.

Next, it is necessary to identify whether a given agreement includes a forum selection clause and if so, what type of dispute settlement provision the parties agreed on. Due to the large number of contracts, I train a machine learning algorithm that automatically identifies choice-of-forum provisions. Separately for clauses referring parties to courts and arbitration, training proceeds in these six steps:

1. I split each contract into paragraphs and draw a random sample of 48,949 paragraphs.

2. I manually inspect the sample, coding each paragraph as “1” if it contains a choice-of-forum provision and “0” otherwise.

3. I randomly divide the paragraphs into two sets, a “training set” (80% of the data) and a “test set” (20% of the data).
With the training set, I calibrate an algorithm ("classifier")\textsuperscript{106} to identify terms and phrases that are most indicative of forum selection clauses based on the preprocessed text in the paragraph.\textsuperscript{107}

Using this trained classifier, I predict whether the provisions in the test set (which the classifier has not seen previously) are forum selection clauses or not.

I compare the predictions generated from the trained algorithm to my hand-coding in order to evaluate the performance of the classifier.

The approach correctly classifies 99.88 percent of the paragraphs. Overall, it can be considered as very accurate, with no strong tendency for false positives or negatives.\textsuperscript{108}

\textsuperscript{106} The algorithm is a Naïve-Bayes classifier. For a thorough examination of its properties, see I. Rish, \textit{An Empirical Study of the Naive Bayes Classifier}, PROCEEDINGS OF THE IJCAI-01 WORKSHOP ON EMPIRICAL METHODS IN ARTIFICIAL INTELLIGENCE 41 (2001). While there are other popular options available, the Naive-Bayes classifier yields the best results in many applications of text analysis. See, e.g., Harry Zhang, \textit{The Optimality of Naive Bayes}, PROCEEDINGS OF THE 17TH INTERNATIONAL FLORIDA ARTIFICIAL INTELLIGENCE RESEARCH SOCIETY CONFERENCE 562, 562 (2004) (discussing the “surprisingly good performance” of naive Bayes classifiers).

\textsuperscript{107} The preprocessing steps include a conversion of all characters to lowercase; the removal of punctuation and special characters; the removal of stop words; and the removal of morphological affixes. The following example illustrates the effect of preprocessing on the text.

\begin{itemize}
  \item \textbf{Before preprocessing}
  \begin{quote}
  This is a forum selection clause between two companies that defines where disputes are litigated and whether jury trials are permitted. It serves as an example.
  \end{quote}

  \item \textbf{After preprocessing}
  \begin{quote}
  forum select claus two compani defin disput litig whether juri trial permit serv exampl
  \end{quote}
\end{itemize}

The training uses a manually selected subset of terms and phrases, detailed in the Appendix of Nyarko, \textit{supra} note 14.

\textsuperscript{108} The correct classification rate alone can sometimes be misleading, since it does not take into account the number of relevant items. For instance, for a test set consisting of 99 irrelevant and 1 relevant paragraphs, a simple algorithm that always considers all paragraphs irrelevant would achieve a correct classification rate of 99 percent. This is why—in addition to the correct classification rate—studies in information retrieval and machine learning use precision, recall, $F_1$ scores and Matthew’s Correlation Coefficients (MCC) to assess the quality of automated classification procedures. For court selection clauses, the precision is 0.89, the recall 0.94 and both $F_1$-Score as well as a Matthew’s Correlation Coefficient are 0.91. The identification of arbitration clauses is even more reliable, with a precision of 0.99, a recall of 1, and an $F_1$-Score as well as a Matthew’s Correlation Coefficient of 1. As a
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I use a similar process to identify whether a contract includes a clause specifying the substantive law governing the contract and if so, which law governs. In a last step, I use a combination of search terms and regular expressions to identify the type of the document (e.g. loan agreement, licensing contract etc.) and the form of the document (e.g. agreement, plan, policy). The entire procedure is described in greater detail in the Appendix.

In order to obtain data on a company’s general counsel, I rely on FactSet. Though it is one of the most comprehensive data sets on general counsel, it has two important limitations. First, the data set contains information only on individuals who are currently active as general counsel. Hence, I do have information about a company’s current general counsel and how long she worked for said firm, but have no information on who was the general counsel prior to the current counsel.109 Second, the general counsel information on FactSet is limited to companies publicly traded on large U.S. stock exchanges such as the NYSE and NASDAQ. In total, the data set includes information on 4,201 general counsels for 4,670 companies drafting a total of 138,617 agreements. Because the SEC uses a company central index key (CIK) to identify companies, whereas FactSet uses the security identifiers CUSIP and ISIN, I rely on Compustat to translate CIKs to ISINs and merge the two data sets.

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109 For example, if a company employed GC1 from 1999-2004, GC2 from 2004-2008 and GC3 from 2008- today, my data shows that GC3 worked for the company since 2008, but I lack information on the general counsels prior to 2008, i.e. on GC1 and GC2.
Table 1: Summary Statistics

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<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Court Clause Length</td>
<td>220</td>
<td>154</td>
<td>29</td>
<td>809</td>
<td>181</td>
<td>196</td>
</tr>
<tr>
<td>Arbitration Clause</td>
<td>0.19</td>
<td>0.39</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Arb. Clause Length</td>
<td>324</td>
<td>245</td>
<td>27</td>
<td>1,128</td>
<td>255</td>
<td>313</td>
</tr>
<tr>
<td>Governing Law Clause</td>
<td>0.75</td>
<td>0.43</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>GLC Length</td>
<td>79</td>
<td>77</td>
<td>16</td>
<td>401</td>
<td>47</td>
<td>66</td>
</tr>
<tr>
<td>U.S.–U.S.</td>
<td>0.89</td>
<td>0.31</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>U.S.–Foreign</td>
<td>0.10</td>
<td>0.30</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Foreign–Foreign</td>
<td>0.01</td>
<td>0.09</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Table 1 contains summary statistics describing the contracts in the data set. The vast majority of contracts are concluded exclusively between U.S. parties (89%). Only 44% of agreements in the period of observation include forum selection clauses, even though 75% include a clause specifying the substantive law of the contract. This may seem puzzling, given that both types of clauses seek to address issues arising out of uncertainties regarding the relevant and applicable legal framework. Among forum selection clauses, those that refer parties to courts are more prevalent than arbitration clauses (30% vs. 19%).

---

110 Column “Mean” reports the mean, “SD” the standard deviation, “Min” the minimum value, “Max” the maximum value, “Med” the median and “IQR” the interquartile range, i.e. the difference between the 25th and the 75th percentile of the corresponding variable.
Figure 1 plots the use of different types of forum selection clauses over time.\textsuperscript{111} It shows that contracts became more likely to include choice-of-forum provisions over the years. However, there is a difference between the propensity to include a forum selection clause referring parties to courts and one that refers parties to arbitration. In particular, the higher propensity to include forum selection clauses is exclusively driven by the increased presence of clauses referring parties to courts. In contrast, arbitration clauses became less common over time. This finding contradicts some of the claims found in the literature contending that arbitration is becoming increasingly popular.\textsuperscript{112}

Next, it is useful to examine the internal consistency of companies to use choice-of-forum provisions. If companies adopt firm-wide policies on the use of forum selection clauses, then we would expect many companies to consistently include them in their contracts. To examine whether this is the

\textsuperscript{111} A Loess-regression is used to draw a smoothed line through the scatterplot.

\textsuperscript{112} For a detailed investigation with a focus on international agreements, see Nyarko, \textit{supra} note 14.
case, for each company in the data set, I collect all of its agreements and compute the average occurrence of choice-of-forum clauses referring parties to courts. The resulting number reflects how internally consistent companies are in their use of choice-of-forum provisions. For instance, if company $i$ has an average rate 0.95, it means that 95% of agreements to which company $i$ is a party include choice-of-forum provisions.

Figure 2: Internal Company Consistency

Figure 2 shows a histogram depicting where between 0 and 1 the mean usage rate lies for all companies in the data set. What can be seen is that the consistency measure is almost normally distributed around 0.5. What this indicates is that the vast majority of companies sometimes use choice-of-forum provisions, while at other times omitting them. There are only very few companies consistently include choice-of-forum provision, which is indicated by the fact that almost no company has a mean usage rate that is anywhere close to 1. Overall, the data suggests that the vast majority of companies lacks a coherent and widely enforced policy on forum selection clauses.
Table 2: Forum Selection Clauses by Industry

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture</td>
<td>13</td>
<td>0.00</td>
<td>0.23</td>
<td>0.38</td>
<td>0.54</td>
<td>0.85</td>
</tr>
<tr>
<td>Services</td>
<td>99,596</td>
<td>0.20</td>
<td>0.32</td>
<td>0.21</td>
<td>0.46</td>
<td>0.75</td>
</tr>
<tr>
<td>Other</td>
<td>9,360</td>
<td>0.02</td>
<td>0.33</td>
<td>0.18</td>
<td>0.46</td>
<td>0.83</td>
</tr>
<tr>
<td>Mining</td>
<td>31,451</td>
<td>0.06</td>
<td>0.32</td>
<td>0.18</td>
<td>0.44</td>
<td>0.77</td>
</tr>
<tr>
<td>Transportation</td>
<td>45,472</td>
<td>0.09</td>
<td>0.31</td>
<td>0.18</td>
<td>0.43</td>
<td>0.74</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>175,413</td>
<td>0.35</td>
<td>0.30</td>
<td>0.19</td>
<td>0.43</td>
<td>0.73</td>
</tr>
<tr>
<td>Trade</td>
<td>40,671</td>
<td>0.08</td>
<td>0.30</td>
<td>0.18</td>
<td>0.43</td>
<td>0.75</td>
</tr>
<tr>
<td>Finance</td>
<td>100,608</td>
<td>0.20</td>
<td>0.28</td>
<td>0.19</td>
<td>0.42</td>
<td>0.77</td>
</tr>
<tr>
<td>Construction</td>
<td>5,268</td>
<td>0.01</td>
<td>0.30</td>
<td>0.15</td>
<td>0.41</td>
<td>0.74</td>
</tr>
</tbody>
</table>

Table 2 breaks the prevalence of choice-of-forum provisions down by industry. Most of the contracts in the sample come from the manufacturing industry, followed by the financial industry and the service industry. What can be seen is that the agricultural industry is the only industry where forum selection clauses are more likely to be included than not included. However, with only 13 observations, these numbers are not particularly reliable. In all other industries, it is more likely not to find a forum selection clause in the contract (between 41% and 46%), even though it is very likely to find a governing law clause in contracts across all industries (between 73% and 85%). Throughout all industries, arbitration clauses are relatively rare, with clauses referring parties to courts dominating the landscape of dispute settlement provisions.

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113 Column “Obs” indicates the number of observations in the data set, “Freq” the relative frequency, “Courts” the fraction of contracts referring parties to a court jurisdiction, “Arb” the fraction of contracts that include an arbitration clause and “Forum” the overall fraction of contracts including any type of forum selection clause (arbitration or courts).
Breaking contracts down by agreement type as in Table 3 paints a somewhat different picture. Joint venture, M&A, licensing, loan and sales agreements are more likely than not to include a forum selection clause. At the same time, contracts providing incentives to key employees, such as employee stock option plans, pension plans and ‘golden parachute’ agreements are the least likely to include a forum selection clause. While caution is advised when interpreting descriptive statistics, these findings are at least consistent with the idea that contracts of great economic importance are more likely to be carefully drafted and parties make a greater effort to anticipate contingencies.

The descriptives are also consistent with isolated findings in the literature on the relevance of dispute settlement clauses in specific settings. For instance, it has previously been argued that contracts over innovative goods, among them joint venture and licensing agreements, are particularly sensitive to the issue of legal enforcement due to a high level of dependence on
Stickiness and Incomplete Contracts

injunctive and emergency relief.\textsuperscript{114} For M&A, it has been argued that the close entanglement of contract law with corporate, securities and antitrust law provides incentives for parties to pay especially close attention to harmonize the legal framework surrounding their deal. In effect, this often means that forum selection clauses refer disputes to Delaware.\textsuperscript{115}

Table 4: Most Popular Court Forums

<table>
<thead>
<tr>
<th>Forum</th>
<th>Mean FSC</th>
<th>Mean GLC</th>
<th>Overlap</th>
</tr>
</thead>
<tbody>
<tr>
<td>New York</td>
<td>0.37</td>
<td>0.26</td>
<td>0.91</td>
</tr>
<tr>
<td>Delaware</td>
<td>0.11</td>
<td>0.15</td>
<td>0.89</td>
</tr>
<tr>
<td>California</td>
<td>0.08</td>
<td>0.09</td>
<td>0.87</td>
</tr>
<tr>
<td>Texas</td>
<td>0.05</td>
<td>0.05</td>
<td>0.89</td>
</tr>
<tr>
<td>Florida</td>
<td>0.03</td>
<td>0.03</td>
<td>0.91</td>
</tr>
<tr>
<td>Illinois</td>
<td>0.03</td>
<td>0.02</td>
<td>0.89</td>
</tr>
<tr>
<td>Nevada</td>
<td>0.02</td>
<td>0.02</td>
<td>0.92</td>
</tr>
<tr>
<td>New Jersey</td>
<td>0.02</td>
<td>0.02</td>
<td>0.94</td>
</tr>
<tr>
<td>Massachusetts</td>
<td>0.02</td>
<td>0.02</td>
<td>0.92</td>
</tr>
<tr>
<td>Pennsylvania</td>
<td>0.02</td>
<td>0.02</td>
<td>0.86</td>
</tr>
<tr>
<td>Ohio</td>
<td>0.01</td>
<td>0.02</td>
<td>0.89</td>
</tr>
<tr>
<td>Colorado</td>
<td>0.01</td>
<td>0.01</td>
<td>0.88</td>
</tr>
<tr>
<td>Minnesota</td>
<td>0.01</td>
<td>0.01</td>
<td>0.84</td>
</tr>
<tr>
<td>Georgia</td>
<td>0.01</td>
<td>0.02</td>
<td>0.91</td>
</tr>
<tr>
<td>Virginia</td>
<td>0.01</td>
<td>0.01</td>
<td>0.80</td>
</tr>
</tbody>
</table>

\textsuperscript{114} Erin O’Hara O’Connor & Christopher R. Drahozal, \textit{The Essential Role of Courts for Supporting Innovation}, 92 TEX. L. REV. 2177, 2182-2183 (2014) (“[P]arties evidently perceive courts as having a relative advantage in providing injunctive relief … In addition, courts are better suited to providing the emergency relief that may be necessary to prevent serious harm to parties’ intellectual property rights.”).

Next, Table 4 depicts how frequently different court forums are chosen.\textsuperscript{116} Consistent with previous findings in the literature,\textsuperscript{117} New York is by far the most popular forum, with 37% of forum selection clauses referring parties to New York courts. It is commonly assumed that the reason for this dominance is the high level of expertise New York courts have in adjudicating complex commercial disputes.\textsuperscript{118} In addition, most large law firms are headquartered in New York and economies of scale incentivize attorneys interested in practicing business law to seek admission to the New York bar, making it an unsurprising primary choice for dispute settlement. Other popular forums include Delaware (11%), California (8%) and Texas (5%).

If a contract includes both a choice-of-forum and a choice-of-law clause, parties consistently match the substantive law to the forum. This finding confirms interviews conducted by Cain and Davidoff in which lawyers stated that their primary concern in drafting these clauses is to avoid an incoherence between the law governing the contract and the forum that interprets it.\textsuperscript{119}

Consider now the question of which law firm assisted in drafting a contract. While contracts often do not name a law firm responsible for drafting the agreement, there are many instances in which they do. Typically, the drafting law firm is disclosed in the notice clause, which requires a copy of any written communication relating to the contract to be submitted to the counsel that assisted in drafting the agreement. Other instances in which law firms appear include fee shifting clauses in which one party agrees to pay for the administrative costs of the other’s counsel or clauses stating where the contract will be signed, which is often in one of the advising law firm’s offices. I exploit this fact using a list of 7,708 law firms with at least 50 employees collected through LexisNexis Academic to identify the external counsel involved in the drafting of the agreement. This approach successfully identifies participating law firms for 105,746 contracts. It is important to note

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\textsuperscript{116} Column “Mean FSC” indicates the share of contracts that refer to the courts in the corresponding jurisdiction among all contracts with choice-of-forum provisions. “Mean GLC” indicates the fraction of contracts applying the substantive law of the corresponding jurisdiction. Column “Overlap” considers only contracts with both a choice-of-law and a choice-of-forum provision. It indicates how likely it is that a contract with a forum selection clause opting into the corresponding jurisdiction also chooses the same substantive law.


\textsuperscript{119} Cain & Davidoff, \textit{supra} note 69, at 98.
that this is not a random sample of all contracts. Contracts identifiably drafted by law firms tend to be longer and more likely to include choice-of-forum and choice-of-law clauses than the average contract.\textsuperscript{120}

### Table 5: Most Frequent Drafters

<table>
<thead>
<tr>
<th>Law Firm</th>
<th># Contracts</th>
<th>Courts</th>
<th>Arbitration</th>
<th>Forum</th>
<th>Law Clause</th>
</tr>
</thead>
<tbody>
<tr>
<td>Latham &amp; Watkins</td>
<td>4,995</td>
<td>0.65</td>
<td>0.25</td>
<td>0.76</td>
<td>0.97</td>
</tr>
<tr>
<td>Skadden Arps Slate Meagher &amp; Flom LLP</td>
<td>4,833</td>
<td>0.69</td>
<td>0.27</td>
<td>0.82</td>
<td>0.97</td>
</tr>
<tr>
<td>Kirkland &amp; Ellis LLP</td>
<td>3,362</td>
<td>0.64</td>
<td>0.22</td>
<td>0.73</td>
<td>0.97</td>
</tr>
<tr>
<td>Simpson Thacher &amp; Bartlett</td>
<td>3,232</td>
<td>0.71</td>
<td>0.21</td>
<td>0.81</td>
<td>0.97</td>
</tr>
<tr>
<td>Greenburg Traurig Llc</td>
<td>2,625</td>
<td>0.68</td>
<td>0.20</td>
<td>0.77</td>
<td>0.95</td>
</tr>
<tr>
<td>Weil Gotshal &amp; Manges LLP</td>
<td>2,310</td>
<td>0.73</td>
<td>0.21</td>
<td>0.81</td>
<td>0.96</td>
</tr>
<tr>
<td>Shearman &amp; Sterling LLP</td>
<td>2,118</td>
<td>0.65</td>
<td>0.15</td>
<td>0.72</td>
<td>0.98</td>
</tr>
<tr>
<td>Vinson &amp; Elkins</td>
<td>2,084</td>
<td>0.66</td>
<td>0.23</td>
<td>0.76</td>
<td>0.97</td>
</tr>
<tr>
<td>Jones Day</td>
<td>2,044</td>
<td>0.74</td>
<td>0.24</td>
<td>0.82</td>
<td>0.94</td>
</tr>
<tr>
<td>Wilson Sonsini Goodrich &amp; Rosati</td>
<td>2,008</td>
<td>0.68</td>
<td>0.31</td>
<td>0.79</td>
<td>0.96</td>
</tr>
<tr>
<td>Wachtell Lipton Rosen &amp; Katz</td>
<td>1,868</td>
<td>0.74</td>
<td>0.21</td>
<td>0.83</td>
<td>0.96</td>
</tr>
<tr>
<td>Dia Piper LLP Us</td>
<td>1,819</td>
<td>0.70</td>
<td>0.27</td>
<td>0.82</td>
<td>0.95</td>
</tr>
<tr>
<td>Davis Polk &amp; Wardwell</td>
<td>1,813</td>
<td>0.78</td>
<td>0.14</td>
<td>0.81</td>
<td>0.97</td>
</tr>
<tr>
<td>Sidley Austin</td>
<td>1,798</td>
<td>0.73</td>
<td>0.23</td>
<td>0.79</td>
<td>0.97</td>
</tr>
<tr>
<td>Morgan Lewis &amp; Bockius LLP</td>
<td>1,775</td>
<td>0.64</td>
<td>0.28</td>
<td>0.74</td>
<td>0.97</td>
</tr>
<tr>
<td>Mayer Brown</td>
<td>1,771</td>
<td>0.68</td>
<td>0.17</td>
<td>0.74</td>
<td>0.95</td>
</tr>
<tr>
<td>Gibson Dunn &amp; Crutcher</td>
<td>1,764</td>
<td>0.67</td>
<td>0.26</td>
<td>0.78</td>
<td>0.97</td>
</tr>
<tr>
<td>Cravath Swaine &amp; Moore LLP</td>
<td>1,698</td>
<td>0.82</td>
<td>0.14</td>
<td>0.85</td>
<td>0.97</td>
</tr>
<tr>
<td>Ropers Gray LLP</td>
<td>1,694</td>
<td>0.66</td>
<td>0.19</td>
<td>0.72</td>
<td>0.96</td>
</tr>
<tr>
<td>Cahill Gordon &amp; Reindel LLP</td>
<td>1,657</td>
<td>0.72</td>
<td>0.07</td>
<td>0.74</td>
<td>0.98</td>
</tr>
<tr>
<td>Akin Gump Strauss Hauer &amp; Feld LLP</td>
<td>1,596</td>
<td>0.65</td>
<td>0.26</td>
<td>0.77</td>
<td>0.96</td>
</tr>
<tr>
<td>Sichenzia Ross Friedman Ference LLP</td>
<td>1,580</td>
<td>0.74</td>
<td>0.16</td>
<td>0.82</td>
<td>0.96</td>
</tr>
<tr>
<td>O Melvyn &amp; Myers LLP</td>
<td>1,506</td>
<td>0.60</td>
<td>0.30</td>
<td>0.77</td>
<td>0.96</td>
</tr>
<tr>
<td>Paul Hastings LLP</td>
<td>1,501</td>
<td>0.70</td>
<td>0.28</td>
<td>0.81</td>
<td>0.95</td>
</tr>
<tr>
<td>Morrison &amp; Forerster LLP</td>
<td>1,453</td>
<td>0.68</td>
<td>0.26</td>
<td>0.79</td>
<td>0.96</td>
</tr>
<tr>
<td>Sullivan &amp; Cromwell LLP</td>
<td>1,433</td>
<td>0.73</td>
<td>0.22</td>
<td>0.82</td>
<td>0.97</td>
</tr>
<tr>
<td>White &amp; Case</td>
<td>1,414</td>
<td>0.73</td>
<td>0.21</td>
<td>0.82</td>
<td>0.96</td>
</tr>
<tr>
<td>Goodwin Procter LLP</td>
<td>1,351</td>
<td>0.69</td>
<td>0.29</td>
<td>0.80</td>
<td>0.96</td>
</tr>
<tr>
<td>Bingham McCutchen LLP</td>
<td>1,302</td>
<td>0.66</td>
<td>0.21</td>
<td>0.75</td>
<td>0.95</td>
</tr>
<tr>
<td>Paul Weiss Rifkind Wharton &amp; Garrison LLP</td>
<td>1,295</td>
<td>0.74</td>
<td>0.21</td>
<td>0.82</td>
<td>0.97</td>
</tr>
</tbody>
</table>

Table 5 depicts the 30 most frequently relied upon law firms. By far the most contracts are drafted by Latham & Watkins and Skadden, Arps, Slate, Meagher & Flom LLP, with 4,995 and 4,833 contracts, respectively. Choice-of-law clauses are almost universally adopted, with most law firms including them in 97% of their contracts. Choice-of-forum clauses are less common, with most law firms including them in 70–80% of contracts.\textsuperscript{121} One notion consistent with the finding that both choice-of-law and choice-of-forum provisions are more likely in contracts in which the drafting firm can be identified is that the supervision of external counsel decreases, but does not

\textsuperscript{120} The average length is 9,207 overall and 23,328 if a law firm drafted the contract. 44% of contracts include a choice-of-forum clause, 74% if a law firm is involved. 75% of contracts include a choice-of-forum clause, 94% if a law firm is involved.

\textsuperscript{121} These numbers are somewhat consistent with an analysis of M&A contracts by Cain and Davidoff, who find that choice-of-law provisions are universally adopted, but choice-of-forum provisions are included in only 86% of contracts. Cain & Davidoff, supra note 69, at 106 (“With respect to choice of forum clauses, 13.5 percent of agreements select no forum at all.”).
reduce to 0, the probability for a contractual gap. Another theory consistent with this finding is that lawyers are used in more complex transactions and that in complex transactions, all participants are more mindful of the forum.

Lastly, I identify the particular counsel responsible for drafting the agreement. Similar to the identity of the drafting law firm, notice clauses typically specify the individuals the notices should be addressed to. I parse the notice clauses from the contracts using regular expressions and then perform a task known as Named Entity Recognition to extract personal names from the notice clauses. Overall, this process identifies 53,952 names in 73,701 contracts.

To summarize, for each material contract, the data set includes (1) information on contract characteristics, such as the type of the contract, its length and the year it has been filed; (2) information on the drafting parties, such as their Central Index Key, their industry and their place of incorporation; (3) information on the choice-of-law and choice-of-forum provisions in the contracts, including whether and where the parties opt for litigation and arbitration; (4) the identity of the lawyers and law firms that assisted in drafting the agreement if available.

IV. LAW FIRM INFLUENCE

Having thus compiled the data set, I proceed with the first test, examining if and to what extent the decision to include or not to include a choice-of-forum provision is influenced by external counsel.

In Figure 2 above, it was already shown that companies seem to lack firm-wide policies on choice-of-forum provisions. Instead, most firms sometimes use and sometimes do not use forum selection clauses. Since the identity of the company does not seem to induce consistency, it seems theoretically plausible that external counsel has ample room to determine independently

\[122\] To perform the task, I rely on the Stanford Named Entity Recognizer, offered by The Stanford Natural Language Processing Group. The Named Entity Recognizer uses a combination of 7 class models for tagging locations, personal names, organizations and others. See Jennifer Rose Finkel et al., Incorporating Non-Local Information into Information Extraction Systems by Gibbs Sampling, PROCEEDINGS OF THE 43ND ANNUAL MEETING OF THE ASSOCIATION FOR COMPUTATIONAL LINGUISTICS 363 (2005). The Named Entity Recognizer is available at https://nlp.stanford.edu/software/CRF-NER.shtml. I supplement the algorithm with a set of rules to guarantee that street and law firm names are omitted. In order to guarantee that I only include the names of external counsel, I additionally require the name to appear shortly after the name of the law firm. Effectively, this excludes the names of internal counsel from the process.
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whether a contract should specify the forum or not.

A. Main Analysis

In deriving a test that investigates law firm influence on the presence of choice-of-forum provisions, consider the following analytical approach: Assume we have four similar contracts, A, B, C and D. Contracts A and B are drafted by the same law firm, whereas contracts C and D are drafted by different law firms. Then we can assess the influence of the actors on choice-of-forum provisions with the following three-step process:  

1. Compute the difference in choice-of-forum clause usage between contracts A and B.
2. Compute the difference in choice-of-forum clause usage between contracts C and D.
3. Compare the quantity computed under (1) to the quantity computed under (2).

If law firms have an influence on whether a contract includes a choice-of-forum provision, then in the aggregate, the probability that two contracts both include the same forum selection clause should be high when the law firms are the same (quantity under (1)) and smaller when the law firms are different (quantity under (2)). A similar rationale applies to inhouse counsel, allowing one to compare the influence of internal legal advisers to that of the law firms.

The main challenge in implementing this procedure is to guarantee that contracts A, B, C and D are in fact similar. This is no easy feat. Indeed, contracts in the data set differ in a variety of ways, such as in the companies that are party to the agreement, the industry or contract type. If left unaddressed, it is at least possible that the difference between two contracts is caused by factors other than the law firm.

In order to ameliorate concerns arising out of this form of omitted variable bias, I employ matching to create pairs of company contracts. Matching is a popular method in the social sciences and causal inference that seeks to pair

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123 Reader familiar with quantitative analyses recognize this setup as a difference-in-difference setup. In essence, it compares the difference of contracts under the same law firm to the difference of contracts under different law firms.

124 In absolute terms.
two units that look similar on a number of dimensions, with the only observable difference being the covariate of interest. Among the different matching algorithms, exact matching is the most restrictive, as it requires each pair of observations to be exactly the same across all characteristics. This has advantages and disadvantages. The main disadvantage is that an exact matching algorithm omits a lot of data, as pairs that are even slightly dissimilar are removed. However, in very large data sets such as this one, omitting data is not a primary concern as long as reliable standard errors can be obtained. The main advantage of exact matching is that it is able to achieve perfect homogeneity across all observed characteristics, making both contracts highly comparable on these observed dimensions.

Having created matched pairs of similar contracts in this way, I use OLS regression to investigate the average law firm influence on the presence of choice-of-forum clauses. I then do the same for general counsel influence. The results are presented in Figure 3. Each row in the plot corresponds to a different model and contains two dots. The red dots indicate the law firm’s influence on choice-of-forum provisions in the contract. For instance, a dot at 0.1 suggests that a change in law firms is associated with a ten percent increase to encounter one contract with and one without a choice-of-forum provision. The blue dot depicts the influence of the general counsel.

The red and blue lines depict 95% confidence intervals and can be thought of as a certainty measure. If the confidence intervals include the dotted line at 0, this suggests that that law firms / general counsel may have no impact on the prevalence of choice-of-forum provisions. If it does not include 0, by conventional measures the influence is statistically significant.

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125 The estimates derived from these pairs decrease potential omitted variable bias and guarantee common support. Donald B. Rubin, Matching to Remove Bias in Observational Studies, 29 Biometrics 159 (1973).

126 Employment and incentive contracts, as well as those in which only one party can be identified are omitted. That is because it cannot be guaranteed that the parties are identical across dyads.

127 Numeric regression tables are included in the Appendix A.II.

128 In statistical jargon, the null hypothesis of no law firm influence cannot be rejected if the confidence interval includes 0. Else it can be rejected by convention.
Figure 3: Law Firm and General Counsel Influence on Forum Selection Clauses

Model (1) only matches on parties and provides a baseline. Model (2) only includes contract pairs where, in addition to the parties, the format, type and industry of the agreements in the pair are identical (i.e. matched pairs). It further controls for the contract type, format and industry through the inclusion of fixed effects.\footnote{The reference category for categorical variables are the most frequent categories (i.e. statistical modes). The reference format is “agreement,” the reference contract type is “M&A” and the reference industry is “Manufacturing.”} It also controls for the difference in years in which the contracts were reported. The resulting analysis guarantees that contracts are highly comparable on the observed dimensions. Model (3) adds party-pair fixed effects to control for unobserved, party-pair specific characteristics.

The results are striking. The probability for two contracts to differ is between 13 and 23 percentage points if both agreements were drafted by the same law firm.\footnote{Obtained from the constant in the baseline OLS regression, see Appendix.} If law firms change, depending on the model specification, the probability increases by 15 to 23 percentage points. In relative terms, this
is an increase of about 100%. Meanwhile, most specifications suggest that the general counsel has no discernable influence on whether or not a contract includes a choice-of-forum provision. And even when the coefficient is statistically significant, it is small, with a difference of six percentage points.

Model (4) investigates the law firm and general counsel influence not on the presence of a choice-of-forum provision, but on the specific jurisdiction parties specify in their clause. Model (5) analyzes the influence on the particular arbitral institution that parties opt for. Both models yield generally consistent results with the other specifications.

B. Identification Through Law Firm Closure

The preceding analysis suggests that law firms have a large influence on the presence of choice-of-forum provisions, whereas there is no consistent evidence that the general counsel is a significant actor. However, we need to exert caution in interpreting these estimates causally. For one, while matching guarantees that the contracts in each pair look identical on all observed characteristics, it is possible that unobserved characteristics, such as the transactional value, still govern both which law firm is hired, as well as whether a choice-of-forum clause is included. Hence the presence of omitted variable bias cannot be ruled out with certainty.

In addition, there is at least the possibility that the causal effect runs in the opposite direction. Companies may choose to hire a certain law firm based on considerations that correlate with the use of choice-of-forum provisions. For instance, it is possible that certain law firms have developed a particular expertise in drafting deals involving companies incorporated in Delaware, whereas others are more proficient in transactions involving California companies. If the place of incorporation affects the incentives to include choice-of-forum provisions, then it may be the case any difference associated with the law firm really is a reflection of company preferences, mediated through the choice of external counsel.

In order to further address these possible shortcomings, I supplement the results with an analysis that allows me to assess whether companies strategically choose their counsel for reasons that are correlated with the use of choice-of-forum provisions. Following an identification strategy introduced by Adam Badawi, I make use of the fact that some law firms

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131 Provided that a forum selection clause is present.
132 Badawi, supra note 32, at 17 (exploiting variation induced by law firm collapses to examine variation in the language of registration statements).
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collapsed during the period of observation. A law firm collapse forces companies to hire new external counsel for reasons that are uncorrelated with both company and drafting preferences.\textsuperscript{133} I exploit this external shock in two ways.

First, if companies self-select into law firms with particular drafting practices or exert control over how law firms draft the provisions, then a change of law firms after a collapse should have no impact on the drafts, since the law firm change was non-strategic and the affected company will hire a law firm with similar practices to the previous one.

In order to examine this claim, I identify in the data set those pairs in which the first contract was drafted under a collapsed law firm and the second contract was drafted by a different firm. These are the contract pairs in which the client can reasonably be assumed to have had no choice but to change law firms due to the collapse. I compare these to contract pairs in which a change of law firms did not occur. If it is true that clients generally self-select into firms based on their template, then we would expect a collapse-induced change of law firms to be no different than no change of law firms at all.\textsuperscript{134}

Second, among the partners who move from collapsing law firms to new law firms, those who change their drafting practices should be less likely to retain clients than those partners who continue the practices of their previous firm.\textsuperscript{135}

In order to assess the validity of this claim, I first create a list of lawyers who have worked at one of the collapsed firms and who have drafted at least five contracts prior to and after their firm’s collapse. I then do a manual web search for each of these names in order to (i) verify that these lawyers have indeed worked at the collapsed firm; and (ii) determine what firm they have moved to after the collapse. This process provides me with names and the employment history of a total of 49 partners working at one of the collapsed law firms.\textsuperscript{136}

\begin{footnotesize}
\footnote{133}{John Morley, \textit{The Spectacular Deaths of Law Firms}, (unpublished manuscript, on file with the author) (2019) (detailing that most law firm collapses happen suddenly and unexpectedly as a consequence of the equivalent of a “bank run” among partners).}
\footnote{134}{The models include an interaction term as the identification assumption is more likely to be satisfied for observations close to the year of collapse.}
\footnote{135}{One might contend that causality runs in the opposite direction. That is, partners who are not going to retain their clients may be more willing to adopt the new law firm’s draft. However, if this relationship exists, it should bias the results upwards, i.e. it should be even easier to detect a significant relationship.}
\footnote{136}{Only one name in the data set is associated with a senior associate, rather than a}
\end{footnotesize}
Next, for each of these partners, I create contract pairs. Each pair includes one contract drafted before and one contract drafted after the collapse. I then look at (i) whether both contracts have the same choice-of-forum provision; and (ii) whether both contracts were written for the same client. If clients are more likely to stay with their partners if the partner sticks to previous drafting practices, then we would expect a negative relationship between a change in drafting practices and the client retention rate.

Figure 4: Using Law Firm Collapse as Identification

Figure 4 presents the results. As can be seen, the collapse-induced law firm change has a significant influence on whether or not contracts include choice-of-forum provisions (Model (1)). At the same time, whether or not a lawyer changes her template has no relevant impact on whether she retains her clients (Model (2)).¹³⁷ Both of these findings indicate that companies do not strategically select their law firms in a way that would correlate with the prevalence of choice-of-forum provisions.

¹³⁷ Even though the coefficient has the predicted sign, the effect size is miniscule with about 1.7%. It is also statistically insignificant, even though the confidence intervals are small. Both of these findings ameliorate concerns arising out difficulties typical to interpreting “null results,” such as a lack of statistical power.
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To sum up, the results of the analysis suggest that the presence and type of choice-of-forum provisions neither follows consistent, firm-wide company policies, nor that it is greatly influenced by the general counsel. Instead, there is ample evidence to support the influence of law firms on the presence of choice-of-forum provisions.

V. Stickiness and First-Mover Advantage

When drafting their agreements, law firms work off of templates. The stickiness hypothesis suggests that the use of templates induces path-dependence.\(^{138}\) That is, whatever provision found in the law firm template is more likely to end up in the final agreement. Conversely, under the null hypothesis of no stickiness, the allocation of rights under the template should have no relevance on the final contract, given that parties can simply bargain over and contract around the initial draft of the agreement.

In order to assess whether law firms indeed negotiate choice-of-forum provisions, I conduct an analysis on all contracts between two law firms. Consider one of such contracts between law firms X and Y, for which I proceed in the following three steps:

1. Identify all contracts that X has drafted in the previous year without the participation of Y, as well as those that Y has drafted without participation of X.\(^{139}\)

2. Compute how similar the text of the present contract is to the text of the agreements that the parties have drafted in the past.

3. Identify the law firm that has drafted the most similar past agreement.

In order to measure the textual similarity of the agreements, I rely on a fuzzy string matching algorithm to compare the first 10% of text in the agreements.\(^{140}\) Fuzzy string matching is a method of text comparison that


\(^{139}\) Subsetting only to those contracts that X has drafted without Y guarantees that the most similar contract of X has not been influenced by Y in any way. To guarantee comparability and computational feasibility, I omit previous agreements of a different type or drafted for clients in another industry.

\(^{140}\) Comparing only the first 10% follows substantive and practical considerations. First, the first 10% predominantly contain recitals, tables of contents, etc. such that templates can
ignores discrepancies which are typically induced by typos or small, context-specific adjustments (such as changing the name of the party). It thus tends to perform much better in identifying essentially identical text strings than other approaches found in the literature, such as the Levenshtein distance or cosine similarity.

After fuzzy string matching, each pair of contracts is associated with a number, ranging from 0 (entirely dissimilar) to 100 (identical). I manually inspected the results and found that a value of 90 or greater guarantees that two agreements are virtually identical copies of one another.

Having thus found a reliable way of identifying who supplied the first draft, we can assess whether law firms bargain over the inclusion and form of choice-of-forum provisions. Under traditional bargaining theory and absent stickiness, a law firm which typically uses choice-of-forum clauses in its contract (and thus has a revealed preference for the use of these provisions) should try to amend a draft that includes a contractual gap. In contrast, under the stickiness hypothesis, the presence of choice-of-forum provisions in the initial draft should be predictive of its presence in the final contract.

be identified even if the substantive terms are considerably different. Second, limiting the comparison to the first 10% guarantees that the choice-of-forum clause itself does not factor into the comparison. And third, as comparing contracts pairwise for such a large data set is computationally intensive, limiting the analysis to the initial 10% guarantees feasibility.

The Python implementation, FuzzyWuzzy, is available at https://github.com/seatgeek/fuzzywuzzy. Among the different algorithms, I opt for the token set ratio. In essence, the token set ratio compares strings based on their unique terms while ignoring the order in which these terms appear.

Robert Anderson & Jeffrey Manns, The Inefficient Evolution of Merger Agreements, (unpublished manuscript, on file with the author) (2016) (using Levenshtein Distance as a measure of copy-pasting in M&A agreements and arriving at the much contested conclusion that most of what lawyers do is “editorial churning” rather than substantively meaningful editing).

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Figure 5: First Drafter Advantage

The results of the analysis are depicted in Figure 5. All models consider only contract pairs in which the most similar agreement from one law firm had a similarity greater or equal to 90 and the most similar draft from the other had a similarity 70 or less. This requirement guarantees that the supplier of the first draft can be identified with great accuracy.144

Model (1) investigates how likely it is that a contract includes a choice-of-forum provision if the identified template specified the forum (blue). It then contrasts this to the probability to find a choice-of-forum provision if the most similar contract from the non-supplier specified the forum (red). The results are striking. If the template includes a choice-of-forum provision, this increases the probability that the present contract includes such a clause by 72 percentage points, from a baseline of 15 percentage points to 87 percentage points. Meanwhile, the influence of the most similar contract from the other law firm has virtually no influence on the present agreement.

Model (2) compares the template influence to the average presence of

144 Based on my manual inspection of the results.
choice-of-forum provisions in the draft receiver’s agreements. Model (3) compares the template’s influence to the average influence of contracts for which the other law firm has supplied the first draft. Again, in both model specifications, the presence of a choice-of-forum provision in the template is highly predictive for whether the present agreement includes such a clause. At the same time, none of the model specifications indicate a significant influence of the preferences of the law firm that did not supply the first draft.

Overall, the evidence strongly suggests that the first draft is highly predictive of what the provisions in the final agreement. Whatever discrepancy there may be between the draft and the final contract, there is no evidence that this discrepancy correlates with the revealed preferences of the non-supplying law firm.

VI. RESISTANCE TO CHANGE

The governing theory on the innovation in the design of boilerplate agreements postulates that changes in the contractual templates may require external, system wide shocks, like changes in the legal framework, to cause a change in the adoption of the template.\textsuperscript{145} The system wide shock that I consider is a change in the law surrounding choice-of-forum clauses and personal jurisdiction. Specifically, the relevant legal framework underwent two important changes in the period of observation. First, the Supreme Court began to significantly restrict the scope of both general and specific jurisdiction through a series of decisions going back to 2010. Second, the Supreme Court removed uncertainty surrounding the enforcement of choice-of-forum provisions in 2013. Each intervention will be described in the necessary detail below.

A. Limits on Personal Jurisdiction

As pointed out above, courts tended to interpret personal jurisdiction both under principles of general and under specific jurisdiction broadly. Under general jurisdiction, many courts applied a “doing business” test, which holds that it is sufficient for a company to do business “with a fair measure of permanence and continuity” in a state in order for the courts in that state to

exert general jurisdiction. Under specific jurisdiction, long-arm statutes employ criteria such as the transaction of business that were sufficient to establish jurisdiction. In practice, there often is not much distinguishing the “transacting business” test from the “doing business” test.

In 2011, the Supreme Court started to take aim at these expansive approaches to personal jurisdiction in the name of due process. The first case was *Goodyear v Brown*, which was decided in June 2011. In that case, plaintiffs were estates of two Americans killed in a bus accident in France. They alleged faulty tires and proceeded to sue the manufacturers, Goodyear’s affiliate in Luxembourg and its branches in Turkey and France, in the courts of North Carolina. The plaintiffs argued that North Carolina courts had personal jurisdiction because the defendants’ parent company and distributor, Goodyear U.S., is a United States company. Goodyear U.S. operates plants and is commercially active in North Carolina, but the subsidiaries argued that their parent companies’ activity was not sufficient to establish jurisdiction over them. In a unanimous decision written by Justice Ginsburg, the Supreme Court sided with the defendants, holding that a companies’ connections to a state must be so “continuous and systematic as to render them essentially at home” in the state exerting general jurisdiction. While the specific circumstances in *Goodyear* left some doubt as to the decisions’ generalizability, the subsequent decision of *Daimler v Bauman* made it abundantly clear that the “essentially at home” test would be the new test courts were required to apply when determining general jurisdiction, in place of the “doing business” test.

In parallel to its reduction of general jurisdiction, the Supreme Court also limited the scope of specific jurisdiction. Decided on the same day as *Goodyear*, *J. McIntyre Machinery, Ltd. v. Nicastro* was a products-liability suit, brought by Robert Nicastro, a worker in New Jersey. Nicastro injured his hand when using a metal-shearing machine produced by McIntyre Machinery, a British company. McIntyre Machinery had very few connections to the U.S. It sold machines through an independent U.S. contractor, only four of which ended up in New Jersey. Its officials attended annual conventions, none of which took place in New Jersey. And it held some U.S. patents on its recycling technology.

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148 Id. at 919 (internal quotation marks omitted).
151 Id. at 878.
The New Jersey Supreme Court sought to base personal jurisdiction on the “stream-of-commerce” doctrine, holding that the mere act of placing goods in the stream of commercial activity with the expectation that they will end up in New Jersey would be sufficient to establish specific jurisdiction. The majority opinion rejected that view, holding that due process requires the defendant to “purposefully avail” itself of the benefits of a state’s laws in order to establish jurisdiction.152 Entering goods into the stream of commerce alone would not suffice. Then, in *Bristol Myers v. Superior Court of California*, the Supreme Court stopped attempts by Californian courts to apply a “sliding scale” approach to the interpretation of specific jurisdiction. Under this approach, California courts sought to argue that doing business in a state was a relevant and sufficient factor to establish specific jurisdiction, effectively mimicking the “doing business” test under general jurisdiction.

The line of Supreme Court decisions shows a general concern for expansive theories of personal jurisdiction. To be sure, it is important to note that none of these decisions are contracts cases. Indeed, the last time the Supreme Court directly addressed personal jurisdiction in a contracts case was in its 1985 decision in *Burger King v. Rudzewicz*.154 However, there is ample evidence to support that the Supreme Court’s decisions had direct implications for the litigation of contractual claims as well, as indicated by several contracts cases in which courts directly reference the Supreme Court opinions to deny jurisdiction.155 In addition, law firms urged their clients to carefully consider putting forum selection clauses into their contracts, as

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152 *Id.* at 886 (“[The defendant’s contacts with the U.S.] may reveal an intent to serve the U.S. market, but they do not show that J. McIntyre purposefully availed itself of the New Jersey market.”)


B. Affirming Enforceability of Forum Selection Clauses

A second important change in the law on forum selection clauses comes in the form of Atlantic Marine Construction Company v. U.S. District Court for Western District Of Texas. Atlantic Marine Construction Co., a Virginia Corporation, entered into a construction contract with J–Crew Management, Inc., a Texas Corporation. The construction contract included a forum selection clause providing that all disputes “shall be litigated in the Circuit Court for the City of Norfolk, Virginia, or the United States District Court for the Eastern District of Virginia, Norfolk Division.” J–Crew subsequently sued Atlantic Marine in the Western District of Texas for payments under the contract.

At its core, the issue in Atlantic Marine was how to enforce a contractual choice-of-forum provision and how much weight courts were required to assign to it in the analysis. The district court and the Fifth Circuit argued that a § 1404(a) motion to transfer is the exclusive mechanism to enforce forum selection clauses referring parties to another federal forum. Further, they held that a § 1404(a) motion requires a balance-of-interest test in which forum

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156 See, e.g., Kelly S. Foss, Suing Foreign Entities in NY: Changes to the Law of Personal Jurisdiction, https://www.harrisbeach.com/news/suing-foreign-entities-ny-changes-law-personal-jurisdiction/ (accessed on October 26, 2018) (stating that, after Daimler, New York corporations “should consider carefully whether a forum selection clause is necessary to protect their right to have potential future disputes resolved by the courts located in New York (...) Without a forum selection clause to invoke, domestic entities must understand that the well-known “doing business” / “minimum contacts” tests are no longer good law.”); Christopher Renzulli & Peter Malfa, Choice of Law Provisions, https://renzullilaw.com/wp-content/uploads/FTD-1406-Renzulli-Malfa.pdf (accessed on October 26, 2018) (“The Supreme Court decision in Daimler AG v. Bauman is a turning point in personal jurisdiction precedent. (...) Provisions in contracts dealing with jurisdiction, such as consents to personal jurisdiction and jurisdictional waiver clauses, have become ever more important when drafting agreements with national corporations or local subcontractors.”); Liz M. Comber, Location, Location, Location – A Brief Overview of Personal Jurisdiction, Forum Selection Clauses, and Why They Matter, https://www.swlaw.com/blog/product-liability-update/2016/08/09/location-location-location-a-brief-overview-of-personal-jurisdiction-forum-selection-clauses-and-why-they-matter/ (accessed on October 26, 2018) (highlighting a change in personal jurisdiction through Daimler and stating that “[companies] should apply careful scrutiny when crafting, negotiating, or agreeing to forum selection clauses as a preemptive measure to ensure that any dispute is brought in a favorable forum, or at least a neutral one.”).


158 Id. at 53 (internal quotation marks omitted).
selection clauses are but one of several factors. Lastly, they held that the burden of proof to show that a venue is improper lies on the defendant.

The Supreme Court agreed that choice-of-forum provisions referring parties to another federal court are enforceable under § 1404(a) motions to transfer. However, it held that these provisions must be “given controlling weight in all but the most exceptional cases”\(^\text{159}\) and that the burden of proof to show the existence of an exceptional case lies with the party defying the contractual agreement. The same standards apply to the *forum non conveniens* analysis applicable to clauses referring parties to another state court.\(^\text{160}\)

In the eyes of practitioners, *Atlantic Marine* “significantly clarified the law regarding enforcement of forum-selection clauses (…).”\(^\text{161}\) It removed procedural uncertainties arising from the different ways in which circuit courts have traditionally enforced these provisions and it strengthened the confidence of private parties that their choice-of-forum provisions would be enforced by federal courts. “After *Atlantic Marine*, lawyers should feel comfortable inserting and relying on the enforceability in federal court of restrictive forum-selection clauses.”\(^\text{162}\)

### C. The Effect of Judicial Interventions

The implications arising from the judicial interventions by the Supreme Court during the period of observation are two-fold. First, they made it more difficult for parties to establish both general and specific jurisdiction, in turn decreasing the number and variety of jurisdictions plaintiffs have access to absent a forum selection clause. Second, forum selection clauses became more reliable instruments of choice to guarantee that a dispute would be heard in the jurisdiction preferred by the parties. Both of these circumstances affect the cost-benefit calculation of including or omitting a forum selection clause from the agreement. Absent stickiness, we would expect law firms to increase their use of choice-of-forum provisions pursuant to the Supreme Court intervention. However, if contracts are sticky, law firms might hold on to

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\(^{159}\) Id. at 60.

\(^{160}\) Id. at 60 (“Section 1404(a) is merely a codification of the doctrine of *forum non conveniens* for the subset of cases in which the transferee forum is within the federal court system”).


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their practice irrespective of changes in the costs and benefits associated with their choice.

In order to examine the law firm’s reaction to the Supreme Court decision, I employ a time series analysis. In particular, to examine whether forum selection clauses became more prevalent overall, I first plot the quarterly rate of forum selection clauses in all material contracts up to the point in time where the Supreme Court intervened. Next, through the use of an ARIMA model, I predict how the time series is expected to continue based on the pre-intervention data. Lastly, I compare the predicted rate of forum selection clauses under the assumption that there has been no intervention by the Supreme Court to the observed rate of forum selection clauses under the Supreme Court’s intervention.

Naturally, this proposed analysis requires me to specify at what point in time the Supreme Court intervention took place. As it is generally preferable to specify an intervention that is too early, rather than too late, I use the point in time of the earliest decisions, Goodyear and Nicastro, which where decided in June 2011. However, one might be concerned with treating Goodyear and Nicastro has the appropriate and most significant interventions. After all, as has been pointed out, Goodyear addresses the establishment of general personal jurisdiction and while I pointed to several cases which suggest the Goodyear analysis to matter for contracts disputes, it is more common for parties to rely on specific jurisdiction in contracts cases. For specific jurisdiction, however, it is more difficult to directly pinpoint when parties and lower courts became aware of the Supreme Court’s hostility towards expansive views of jurisdiction. That is why, in addition to a hypothesized intervention under Goodyear, I specify an alternative time of intervention at the point where Atlantic Marine was decided, i.e. in December 2013.

\[^{163}\text{GEORGE EP BOX ET AL., TIME SERIES ANALYSIS: FORECASTING AND CONTROL} \text{(1970).}\]
\[^{164}\text{If the hypothesized intervention takes place before the observed intervention, then the ARIMA model will still use only untreated observations for its prediction.}\]
\[^{165}\text{See supra note 155.}\]
The left plot in Figure 4 depicts results under the assumption that the relevant period of intervention is Goodyear. The right plot assumes that the relevant intervention is Atlantic Marine. As can be seen, the observed rate of forum selection clauses does not fall outside of the predicted rate based on pre-intervention observations. Hence, there is no evidence to support the notion that the overall inclusion rate of forum selection clauses is susceptible to nuanced changes in the relevant legal framework.

One might contend that it is difficult to find an effect of judicial intervention because the Supreme Court decisions have heterogeneous effects for different types of contracts. Both the “essentially at home” test under general jurisdiction, as well as most long-arm statutes take into consideration how closely a company is linked to the jurisdiction of the plaintiff’s choice. Forum selection clauses thus are especially important to companies with weak ties to their preferred jurisdiction. This means that the incentives to include a forum selection clause should be especially pronounced for companies that intend to litigate in a forum that is neither the principal place of business nor the place of incorporation for any of the parties. For others, the change in the law might be less critical.\textsuperscript{166}

This suggestion, too, is testable. What follows from it is the hypothesis that the judicial intervention should have had a strong effect on the frequency with which forum selection clauses are used that refer parties to courts outside of the state of incorporation and principle place of business (“outside forum selection clause”). At the same time, the rate of forum selection clauses

\textsuperscript{166} Albeit it is still of some relevance.
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referring parties to the principal place of business or place of incorporation (“inside forum selection clauses”) should remain unaffected.

Distinguishing between inside and outside forum selection clauses yields two different time series. We can compare these time series to examine whether the judicial intervention had an effect. In particular, if the time series show similar movement prior to the intervention but diverge after the intervention, then this is evidence that the judicial opinions influenced the prevalence of outside forum selection clauses. In contrast, if the movement is similar prior to the intervention and after the intervention, this suggests that there is no evidence of an effect due to judicial intervention.\footnote{I employ the synthetic controls method for this test in order to align the two time series on pre-intervention data. For details, see Kay H. Brodersen et al., Inferring Causal Impact Using Bayesian Structural Time-Series Models, 9 THE ANNALS OF APPLIED STATISTICS 247 (2015).}

Figure 5: Synthetic Controls Analysis Pre- and Post-\textit{Goodyear} (left) and \textit{Atlantic Marine} (right)

Figure 5 shows the results. As can be seen in the left plot, pre-\textit{Goodyear}, the time series for inside forum selection clauses (after implementing the synthetic controls method) tracks the prevalence of outside forum selection clauses closely, indicating that the time series used as a control unit is a good comparator in terms of the outcome measure. After \textit{Goodyear}, the two time series still move together, which suggests that \textit{Goodyear} had no differential impact on inside and outside forum selection clauses. As such, even the contracts which, based on theoretical considerations, should be especially sensitive to changes in legal framework show no indication that \textit{Goodyear} had any relevant effect. As before, the right plot investigates whether \textit{Atlantic
Marine may be the relevant decision, but again, no significant changes can be detected.

Overall, there is no evidence to support the hypothesis that subtle changes in the legal framework matter for the inclusion of choice-of-forum provisions. This finding is consistent with previous results in the literature which show that the language in the *pari passu* clauses is resistant to changes in the law.\(^{168}\) Similarly, it has recently been found that the language in choice-of-law provisions of corporate bonds referring parties to New York is insensitive to changes in the relevant jurisprudence.\(^{169}\)

**VII. LIMITATIONS & NORMATIVE IMPLICATIONS**

Using the example of forum selection clauses, the empirical analysis reveals strong support for the stickiness hypothesis. The findings are thus at odds with much of the traditional literature, as well as judicial reasoning on the drafting of contracts. Both typically ignore the role and preferences of the law firm entirely, instead assuming that the final allocation of the contractual surplus will be optimized.\(^{170}\) With that said, it is important to recognize and acknowledge three important limitations of this study in order to adequately contextualize the findings.

First, while it seems plausible to assume that the identified shocks in the study (law firm closure and Supreme Court jurisprudence) are as-if random, this study remains an observational study and not a controlled experiment. As such, it cannot be ruled out with certainty that some of the findings are correlational, rather than causal.

A second caveat of this study that deserves attention relates to the breadth of its scope, where limitations apply across two dimensions.


\(^{169}\) John F. Coyle, *Choice-of-Law Clauses in US Bond Indentures*, 13 Capital Markets Law Journal 152, 158 (2018) (discussing a 2010 decision of the New York Court of Appeals which held that statutes of limitation are procedural and thus not incorporated automatically by inclusion of a choice-of-law provision. However, since 50 interviews reveal that the vast majority of attorneys would want their choice-of-law provision to extend to statutes of limitation, Coyle hypothesizes that they would need to adapt their language accordingly. However, “[v]irtually none of the indentures in the data set address the distinction between substantive law and procedural law. Only 2 percent of these indentures contained language incorporating the procedural law of New York. This omission would not matter overmuch if the indentures all contained exclusive forum selection clauses requiring all disputes to be litigated in New York. However, the majority of the indentures lacked any sort of forum selection clause”, 158-159).

\(^{170}\) Supra notes 23, 53–55 and accompanying text.
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First, this study only considers material contracts, but does not include day-to-day agreements of smaller value. It may be argued that the latter differ substantially from the sample studied here in ways that have important implications for the issue of forum selection.\footnote{171 See, e.g., Christopher R. Drahozal & Stephen J. Ware, *Why Do Businesses Use (or Not Use) Arbitration Clauses?*, 25 OHIO ST. J. ON DISP. RESOL. 433, 455 (2010) (arguing that contracts of smaller value are more likely to rely on arbitration, whereas “bet-the-company” contracts and other high-volume transactions will refer to litigation).} At the same time, it can be assumed that high-value transactions are most likely to be thoroughly scrutinized by the drafters, precisely because the stakes are so high.\footnote{172 Eisenberg & Miller, supra note 117, at 349 ("The importance of [material agreements] to corporate operations suggests that the contracts receive care and attention when they are negotiated and drafted.").} If we find evidence to support the stickiness hypothesis even in these high-stakes interactions where the drafters have significant incentives to optimize the provisions, it is at least plausible to assume that the findings can be extrapolated to the set of lower-stakes agreements as well.

Second, and more importantly, this study investigates only the use of forum selection clauses. Forum selection clauses differ from other provisions in several important ways. First, even though choice-of-forum provisions can have important allocative implications, they are “non-price” terms, which differ in important ways from other contractual provisions. For instance, non-price terms are typically not included on the initial term sheet and even though the Supreme Court suggests otherwise,\footnote{173 Supra note 54.} both practitioners\footnote{174 In interviews conducted in the context of this study, several partners and a general counsel suggested that they would not seek to adjust the price in response to changes in the choice-of-forum provisions, because price-adjustments require additional approval. They indicated, however, that they would trade off non-price terms against each other.} and standard models of contract drafting\footnote{175 Albert Choi & George G. Triantis, *The Effect of Bargaining Power on Contract Design*, 98 VA. L. REV. 1665, 1671 (2012) (detailing a two-stage negotiation process in which price terms are fixed first); Jeffrey Manns & Robert IV Anderson, *The Merger Agreement Myth*, 98 CORNELL L. REV. 1143, 1776 (2012) (describing that non-price terms typically cannot be traded off against price terms).} agree that non-price terms cannot realistically be traded off against price terms, but rather present a distinct set of provisions that are bargained for separately. At the same time, law firms tend to play a very limited role in the bargaining process surrounding price terms,\footnote{176 Choi & Triantis, supra note 175, at 1671 (“[The] price and other important terms are decided by the business principals, and the design details are delegated to their respective lawyers” (internal quotation marks omitted)).} so that any effect induced by external counsel is unlikely to be found in them. Arguably, this makes non-price terms the more desirable object of

\hspace{1cm}
study in the present case.

Nonetheless, even though choice-of-forum provisions can have important allocative effects, it would certainly be an overstatement to suggest that they are the most significant non-price terms that determine the welfare gains of the parties.\textsuperscript{177} As such, it is important to recognize that this Article identifies stickiness with respect to a very particular type of clause that has at best moderate allocative implications.

Indeed, there is evidence to suggest that drafters do pay significant attention to some secondary provisions and that these provisions may then be drafted with the utmost care and precision. Perhaps the best example is provided by the ABA’s Deal Point Studies.\textsuperscript{178} Here, the Mergers & Acquisitions Committee investigated the correlation between the “Buyer Power Ratio” (BPR) and the wording of certain provisions in M&A contracts. The BPR is simply the Buyer’s market cap divided by the purchasing price. If a large company buys a small company, the BPR will be high, whereas it will be smaller if the companies are of relatively similar size. The authors of the study show that much of the language in M&A contracts changes in subtle ways, being more beneficial for the buyer if the BPR is high and the buyer has much bargaining power and less preferential if the BPR is low.\textsuperscript{179}

Nonetheless, the fact that drafters do carefully adjust the language in some non-price terms does not necessarily imply that the clauses that receive the most attention are economically significant. For instance, one of the most heavily investigated and bargained over provision in M&A transactions is the Material Adverse Change (MAC) clause. In essence, MAC clauses specify the conditions under which a buyer may walk away from a deal if specific adverse events occur between the time of the signing of the agreement and the closing that negatively impact the target company. MAC clauses are the frequent subject of scholarly interest\textsuperscript{180} and the ABA Deal Point Study shows

\textsuperscript{177} Generally, the allocative implications of the substantive law are likely to be greater than those of the forum.

\textsuperscript{178} See, e.g., Rick Climan & Paul Koenig, Impact of “Buyer Power Ratio” on Selected M&A Deal Terms in Acquisitions of Privately Held Target Companies by Publicly Traded Buyers (American Bar Association & SRS Acquiom Inc. 2017).

\textsuperscript{179} For instance, if the BPR is below 10, the probability to find an express exclusion of consequential damages from the indemnifiable damages is about 0.5, whereas it decreases to 0.2 if the BPR is greater than 200. Id. at 37.

\textsuperscript{180} For just three examples, see Eric L. Talley, On Uncertainty, Ambiguity, and Contractual Conditions, 34 DEL. J. CORP. L. 755 (2009); Robert T. Miller, Canceling the Deal: Two Models of Material Adverse Change Clauses in Business Combination Agreements, 31 CARDOZO L. REV. 99 (2009); Adam B. Chertok, Rethinking the U.S.
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that MAC clauses are carefully drafted to reflect the BPR. However, the first relevant case in which a Delaware court allowed a buyer to actually invoke the MAC clause in order to walk was in October 2018.\textsuperscript{181} Prior to this point, courts have been hesitant to enjoy the thought that a material adverse event occurred, even if quarterly results after signing a deal dropped significantly.\textsuperscript{182} Hence, even though the distributional consequences of a material adverse change may be severe if it occurs, one may raise doubts as to whether MAC clauses really are of profound economic relevance, given that the standard that needs to be met is so high.\textsuperscript{183} Contrast this to forum selection clauses, which, in addition to their relevance in optimizing performance,\textsuperscript{184} have economic implications whenever a contract-related dispute occurs. It is at least conceivable that their economic significance does not significantly differ from those of alternative provisions that receive more attention, such as MAC clauses.\textsuperscript{185} Ultimately, more research on other types of provisions is necessary to assess the interaction between economic value and stickiness of drafting practices. The methodology of supervised text classification presented in this Article lends itself to such inquiries, making it possible to study drafting practices with respect to virtually any provision that is typically encountered in commercial agreements.

A third limitation, and that the same time another fruitful ground for future research, relates to the unobservability of the substantive mechanism which causes drafting practices to vary between law firms. As mentioned


\textsuperscript{181} Akorn, Inc. v. Fresenius Kabi AG. No. CV 2018-0300-JTL, 2018 WL 4719347 (Del. Ch. Oct. 1, 2018). There is one case, Genesco, in which a court in Tennessee assumed that a material adverse event had occurred, but that it had no impact on the duties of the parties. See Genesco, Inc. v. Visa U.S.A., Inc., 302 F.R.D. 168 (M.D. Tenn. 2014). However, the specific wording of the clause, as well as the fact that the decision comes from courts in Tennessee, rather than Delaware, means that Genesco lacks precedential value and received almost no attention, see Daniel Gottschalk, Weaseling out of the Deal: Why Buyers Should Be Able to Invoke Material Adverse Change Clauses in the Wake of a Credit Crunch Comment, 47 HOUS. L. REV. 1051, 1065 (2010).

\textsuperscript{182} IBP, Inc. v. Tyson Foods (2001); Hexion v. Huntsman (2008).

\textsuperscript{183} Writing in 2009, David Cheng points out that “no buyer has ever successfully proved a MAC in Delaware” and that buyers should be “cautious about their ability to establish a MAC under Delaware law.” David Cheng, Interpretation of Material Adverse Change Clauses in an Adverse Economy Survey, 2009 COLUM. BUS. L. REV. 564, 598 (2009).

\textsuperscript{184} Supra notes 64–72 and accompanying text.

\textsuperscript{185} To be sure, observed litigation is an equilibrium response and it is possible that the mere shadow of the MAC is sufficient to have important economic consequences. Nonetheless, the impossibility to establish a material adverse change makes it at least possible that the attention MAC provisions receive does not match their distributional or allocational significance.
above, the study of the omission of choice-of-forum provisions renders some mechanisms that have previously been proposed in the literature to explain stickiness, such as fear of the unknown or network effects, improbable.\textsuperscript{186} Though it cannot be ruled out with certainty, it appears similarly unlikely that the results can fully be explained by reference to drafting or negotiation costs.\textsuperscript{187} However, there remain at least two ways in which the results may plausibly be understood.

A first interpretation is that the results describe a principle-agent-dilemma.\textsuperscript{188} A principal-agent dilemma arises when the principal gives discretion to her agent to act on her behalf but the principal’s and the agent’s interests do not perfectly align. The principal has the choice to make certain expenses to align the agent’s interest with her own, such as monitoring or a performance-based compensation scheme.\textsuperscript{189} If these measures are insufficient or too costly, the principal may incur a residual loss stemming from the agent acting in her own self-interest, rather than in the principal’s best interest.

Applying this conceptual framework to the present scenario, it may be the case that law firms are granted discretion in designing choice-of-forum provisions, but that they lack incentives to use this discretion in their clients’ best interest. This, in turn, may then explain why law firms do not, for instance, challenge the absence of choice-of-forum provisions in a draft they receive even though they frequently use these clauses in their own contracts.

An alternative understanding of the findings is that they characterize a cognitive error or inattention on behalf of legal counsel that ultimately leads to inefficient contracting. This characterization is consistent with an explanation provided by John Coates, who finds that inexperience of external counsel can explain observed variation in takeover defenses in corporate charters.\textsuperscript{190}

The present study provides no definitive answer for what the appropriate

\textsuperscript{186} See supra note 83–87 and accompanying text.

\textsuperscript{187} Supra note 71–72 and accompanying text.

\textsuperscript{188} Choi et al., The Black Hole Problem in Commercial Boilerplate, supra note 28 (proposing an agency cost explanation that would make terms unresponsive to changes in the legal environment). See also GULATI & SCOTT, supra note 28, at 141 (discussing stickiness as an agency dilemma).


\textsuperscript{190} Coates, supra note 31.
causal mechanism is that explains the results. However, some of the evidence is at least suggestive. For one, in interviews I conducted with transactional lawyers, the unanimous expectation was that choice-of-forum clauses were included in virtually all material contracts since leaving the forum unspecified would be “borderline malpractice” and “sloppy.” Strikingly, this sentiment was expressed even by counsel that commonly omitted forum selection clauses from their own agreements. Further, a former general counsel of a leading Fortune 500 company noted that he “would always want to specify the forum in advance.” Against this backdrop, it seems at least plausible to assume that lawyers are expected to specify the forum in their contracts ex ante and that those who do not make an avoidable error. Such an interpretation would also be consistent with findings by other scholars, which at times revealed profound misunderstandings among transactional lawyers about fundamental aspects of drafting forum selection clauses.

In addition, in the Appendix, I present results of an abnormal returns analysis which suggests that contracts which include choice-of-forum provisions yield higher returns to the reporting companies than similar contracts that do not include these clauses. Of course, one needs to exert caution when interpreting this difference causally. Contracts with choice-of-forum clauses may be drafted more carefully and may thus differ on a number of dimensions, other than the presence of a forum selection clause. But the findings are at least consistent with the notion that failing to specify the forum correlates with a suboptimal drafting practice that has negative economic consequences. More research is certainly required to obtain a definitive answer, but based on the available evidence, it seems plausible that cognitive errors and inattention are significant drivers of stickiness, and that these ultimately lead to the suboptimal allocation of a contractual surplus.

With these limitations in mind, the results have important implications for the development of contract law in general, empirical scholarship on contracts, as well as the legal profession.

The traditional account by which sophisticated actors maximize the joint surplus of the contract and allocate the rights optimally has significant practical consequences. For instance, a belief in the account’s descriptive
accuracy for how contracts between sophisticated actors are negotiated and drafted can stifle legal innovation, as limited resources and scholarly attention are shifted towards other areas of law in which the need for an intervention seems more pressing. Default rules offer an illustrative case. The popular Coase Theorem\(^{194}\) assumes that sophisticated parties in high-stakes transactions will simply contract around inefficient default rules, given that the transaction costs are comparatively small. This could suggest that there is no pressing need for regulators or the judiciary to invest in optimization of the legal framework. As detailed above, one example for this dynamic are the default rules on personal jurisdiction.

The Supreme Court has been remarkably active in its effort to clarify and fill out the law surrounding personal jurisdiction in both consumer contracts\(^{195}\) and torts.\(^{196}\) In contrast, the court has not touched the issue of personal jurisdiction in the context of arms-length contracts, even though the default rules do not always provide much certainty to the parties. A strong belief in the descriptive accuracy of the parties’ capability to reach an optimal allocation of contractual rights is consistent with the court’s behavior. After all, the transaction costs for including a choice-of-forum provision are low and parties can simply contract around the default. It may thus seem as if developing the law for commercial contracts is a third-order concern, especially when comparing it to domains in which the bargaining power is unequally distributed\(^{197}\) or there is no bargaining at all.\(^{198}\) However, the findings of this study suggest that, at least with respect to choice-of-forum clauses, this reasoning might be misguided. Contractual gaps, and with them the default rules on personal jurisdiction, are sticky and can have an important economic impact even in agreements of very high value. Their significance implies that the default rules deserve more scrutiny than they often receive, as designing and improving on defaults can have important welfare implications.

In addition to its implications for contract theory, the results also speak to the interaction between empirical and theoretical research on contract law. When studying contractual design, there is a tendency in the literature to view

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\(^{194}\) Coase, *supra* note 22.


\(^{197}\) As is the case for most consumer contracts.

\(^{198}\) As in torts.
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a clauses’ prevalence and longevity as evidence for its optimality. If the evidence defies an intuitive explanation, theoretical accounts are revised in order to match up the model to the evidence. The consequence of this process are increasingly complicated and non-intuitive theories on the costs and benefits of contractual provisions that become more and more difficult to verify. An example to illustrate this dynamic is the aforementioned case of pari passu. After publishing the finding that the language of pari passu clauses seems to be insensitive to external shocks, several rational design explanations were proposed. For instance, one account holds that the language is not altered because it may still provide some protection in the future if the institutional framework surrounding sovereign bond contracts changes. Another account suggests that ambiguity in the language of pari passu clauses may be explained with a desire to fine-tune the probability of breakdowns during restructuring negotiations. The model rests on a number of important assumptions, including a high degree of asymmetric information.

The findings of this study call into question the virtues of such ex post rationalizations of contract design. As was shown, contracts between even the most sophisticated actors do not necessarily converge optimally, but instead can include a suboptimal allocation of rights. As researchers, we need to be mindful of and clearly distinguish between the normative and positive aspects of contract theory. Trying to understand why there is a gap between expectation and reality, rather than theorizing it away, could significantly improve our understanding of contractual design. In order to do so, it seems necessary for theoretical models to take into account the role of the law firm as an important, yet often overlooked actor.

199 Jérôme Barthélemy & Bertrand V. Quélin, Complexity of Outsourcing Contracts and Ex Post Transaction Costs: An Empirical Investigation, 43 JOURNAL OF MANAGEMENT STUDIES (2006); Eisenberg & Miller, supra note 117; Rutledge & Drahozal, supra note 84; Hoffman, supra note 145.


202 From the perspective of the parties bound by the contracts.

Some authors have taken a first step in that direction and have begun to highlight the importance of the law firm for the substantive terms of specific categories of legal documents. This study further adds to said literature, demonstrating that the law firm is a significant actor in many contexts that far exceed the particular domains subject to previous studies, such as the language in S-1 registration statements\(^ {204}\) or corporate charters.\(^ {205}\) At the same time, we still know surprisingly little about law firm preferences during the drafting process and how counsel chooses to allocate her bargaining power and attention. Future research illuminating how law firms form their preferences and when these preferences differ from their clients’ could make significant contributions to both contract theory and jurisprudence on contract law, while at the same time ensuring practical relevance.

The finding that not all law firms seem to draft similar agreements for similar clients also has important implications for legal education. Law schools have often been confronted with claims that they would not prepare students well enough for practice, raising doubts as to whether a legal education should not best be considered a mere signaling device while the real conveyance of practically relevant skills happens “on the job.” This criticism has intensified with the 2007 Carnegie Report on the Legal Profession. The identified heterogeneity in drafting practices demonstrates an opportunity to create value through legal services and the role law schools have in it. In particular, young attorneys sometimes spot oddities in contracts but conclude that the fault most likely falls with them, given that the template is time-tested and must have been written by lawyers much more experienced than they are.\(^ {206}\) This is especially concerning given that young lawyers are most likely to be free of a status quo bias, putting them in an ideal position to reassess contract clauses independently and thus correct insufficient but cemented terms. Law schools are best situated to break the resulting cycle of the perpetuation of inefficient contract terms by providing students with the necessary skills and confidence to reevaluate the efficiency of contractual terms in commonly used drafts and propose adjustments where necessary. This, in turn, can substantially increase the value creation of their graduates for their client.\(^ {207}\)

\(^{204}\) Badawi, supra note 32.

\(^{205}\) Romano & Sanga, supra note 30.

\(^{206}\) GULATI & SCOTT, supra note 28, at 94 (quoting an interview in which a young attorney’s faith in the optimality of the template lead her/him to abstain from tempering with the language).

This Article is the first to provide comprehensive evidence for the stickiness hypothesis across multiple types of commercial agreements. It is also the first to demonstrate that contractual gaps, rather than written clauses, can be sticky. The stickiness of contractual gaps is the result of a heavy reliance on templates by external counsel during the drafting process, suggesting that default rules are more important than is traditionally assumed. A better understanding of how law firms form their preferences and how these preferences diverge from their clients’ can greatly increase the predictions generated from theories of contracting and guarantee that they remain practically relevant.
APPENDIX

A.I. FORMALIZING INCENTIVE COSTS

The following formalizes the theory of incentive costs introduced by leaving the forum unspecified.

Assume a contract between potential plaintiff $P$ and potential defendant $D$. $D$ is contemplating whether to breach the contractual terms, harming $P$ for an amount of $v$, or whether to incur forbearance costs $\gamma$ and comply. It is socially optimal for $D$ to breach if

$$\gamma > v$$

Without legal recourse, $D$ will not invest in forbearance. If $P$ has the option to seek legal recourse, she can sue $D$ for damages in the amount of $d$, producing litigation costs of $\delta_p + \delta_D = \delta$. Now consider the possibility for parties to specify a court forum ex ante, where the forum is denoted $x \in X$. Different forums have different dispute settlement costs and award different damages. Incorporating the possibility of forum selection, we can state that $D$ will breach if

$$\gamma > d_x + \delta_x$$

In order to maximize the joint surplus of the contract, $D$ has to be incentivized to breach only when it is efficient. This condition is satisfied if

$$v - d_x + \delta_x$$

Assuming for simplicity that overdeterrence is as harmful as underdeterrence, parties thus maximize their joint utility and overall welfare if they choose from the set of forums that minimize the difference between harm and the sum of damages and litigation costs, formally

$$X^* \equiv \{x \mid x \in X, \arg\min_x f(x) = d_x + \delta_x - v\}$$

What about parties that do not choose a forum? They leave the choice where to sue up to $P$, who can choose from all forums that accept jurisdiction under the default rule. Since $P$ has an incentive to maximize her own as opposed to the joint surplus of the contract, there is no guarantee that the forum chosen by $P$ is the one closest to the social optimum. In particular, let
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$X'$ be the set of forums that $P$ can sue in. Under the default rule, at the minimum this includes $D$'s state of incorporation and economic headquarters. $P$ will choose to sue in the state in which the difference between her damage award and her litigation costs is maximized. This set is defined by

$$X'^* \equiv \{x \mid x \in X', \arg \max_x f(x) = d_x - \delta_{x,P}\}$$

A.II. Regression Results as Tables

The following tables depict the numeric regression results for the figures presented in the main paper.

Table A.1: Law Firm Influence on Forum Selection Clauses

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Note: 'p<0.05; "p<0.01; ""p<0.001
### Table A.2: General Counsel Influence on Forum Selection Clauses

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*Note:* 'p<0.05; **p<0.01; ***p<0.001

### Table A.3: Client Retention After Collapse
## Stickiness and Incomplete Contracts

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<td>$(0.024)$</td>
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| Observations | 5,042 |
| R²           | 0.410 |
| Adjusted R²  | 0.406 |

*Note: “p<0.05; ″p<0.01; ‴p<0.001*

Table A.4: Influence of the First Draft

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<td></td>
<td>(1)</td>
</tr>
<tr>
<td>$\text{FSC}_{Template}$</td>
<td>$0.725^{***}$</td>
</tr>
<tr>
<td></td>
<td>$(0.021)$</td>
</tr>
<tr>
<td>$\text{PSC}_{Other}$</td>
<td>$-0.003$</td>
</tr>
<tr>
<td></td>
<td>$(0.013)$</td>
</tr>
<tr>
<td>Mean $\text{FSC}_{Other}$</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean $\text{FSC}_{OtherTemplates}$</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>$0.167^{***}$</td>
</tr>
<tr>
<td></td>
<td>$(0.060)$</td>
</tr>
<tr>
<td>Industry FEs</td>
<td>✓</td>
</tr>
<tr>
<td>Contract Type FEs</td>
<td>✓</td>
</tr>
<tr>
<td>Year FEs</td>
<td>✓</td>
</tr>
<tr>
<td>Observations</td>
<td>2,848</td>
</tr>
<tr>
<td>R²</td>
<td>0.578</td>
</tr>
<tr>
<td>Adjusted R²</td>
<td>0.573</td>
</tr>
</tbody>
</table>

*Note: “p<0.05; ″p<0.01; ‴p<0.001*
A.III. ABNORMAL RETURNS

The results of an abnormal returns analysis, where the event is the day at which an agreement was filed with the SEC. The left plot includes all agreements with choice-of-forum provisions. The right plot includes matched agreements without choice-of-forum provisions. The matching algorithm is propensity score matching with replacement. Propensity scores are derived from a logit regression of forum selection clause inclusion on the length of the agreement, its type, industry as well as the law firms that participated.

Figure A.1: Abnormal Returns Analysis of Contracts Including a Choice-of-Forum Provision (top) and Matched Contracts One (bottom)
A.IV. Detailed Description of Text Analysis Procedure

The textual analysis of the contracts was conducted in Python 2.7, relying to a great extent on the Natural Language Toolkit (NLTK). Most of the techniques used are described in detail in *Natural Language Processing with Python*. Due to the large number of contracts and the associated computational intensity, the program was executed on the Savio Institutional Cluster of UC Berkeley's BRC High Performance Computing.

A. Identification of Parties

In order to identify which agreements are international, I scan each agreement for party names. However, scanning the entire contract for party names is computationally intensive and leads to many false matches, as companies that are not party to the agreement might be mentioned later in the text. I thus first identify the paragraph containing the parties to the agreement. Virtually all contracts begin by naming the parties and then specifying how the contracts refers to them. The term by which the parties are referenced is specified in quotation marks contained in parentheses. For example, an agreement might begin stating

This purchasing agreement (this "Agreement") is entered into by and between company A and B (together referred to as "the parties").

208 PLEASE NOTE: This subsection, as well as subsections A.IV and A.V are identical to the Appendix in Nyarko, supra note 14. Depending on the journal guidelines, they may be removed prior to publication.

209 Bird 2009. The current version of this book is accessible online at http://www.nltk.org/book/
I use the following regular expression to identify the first paragraph that contains quotation marks encapsulated within parentheses:

\( \forall \cdot ^* ' ( + ? ) ^* \)

I include the first matching paragraph into the list of paragraphs containing party information. In addition, I add the two paragraphs preceding the match and all consecutive paragraphs that also contain quotation marks within parentheses. That is because the party information is sometimes broken up across multiple paragraphs, even though these cases are the rare exception.

I then define a list of 632,442 companies and individuals that have disclosed information through filings with the SEC. These parties are included in lowercase and in different forms to take into account that parties might write company names differently. For example, the algorithm identifies with the company "PT Holdings, Inc." all mentions of "pt holdings, inc.", "pt holdings inc", "pt holdings incorporated" and "pt holdings". Versions that exclusively include lemmatized words mentioned in a collection of 234,377 words of the English vocabulary are dropped. This is necessary as there are company names such as "Hungary" which lead to many false hits. In total, the final list includes 630,106 companies with their place of incorporation and their economic headquarters.

The program scans the defined paragraphs for the mentioning of these companies. If multiple company names are included in a paragraph but one company name is fully included in another company name, only the longest company name is regarded a party to the contract. This is done because some company names are so generic that they are often included in other company names. For instance, the company "Energy Inc." is fully included in "Hawaii Energy Inc." but is certainly not a party if the company name "Hawaii Energy Inc." is mentioned, so "Energy Inc." is then dropped.

The paragraphs are then scanned for the mentioning of countries in their noun and adjective form. For any given country \( i \), if the list of companies does not yet include a company from country \( i \) but \( i \) is mentioned in the paragraph, an unidentified company from country \( i \) is added to the list of parties.

The program then simply counts the number of companies registered in the U.S. and those registered outside of the U.S. to determine whether the contract is domestic, international or foreign. If information on the place of registration is not available, the location on file with the SEC is used instead.
Stickiness and Incomplete Contracts

B. Identification of Contract Format and Date

In order to identify the contract format, I scan the text for the first mentioning of one of the following words: agreement, plan, note, policy, guideline, program or contract. The format of the contract corresponds to the word that appears first. For example, if a contract has the heading "Purchasing Agreement", the format will be "Agreement", whereas a document entitled "Note Exchange" will be considered a "Note".

In order to identify the contract type, I first define terms that are indicative of the type of contract. The following is a breakdown of agreement types and corresponding terms.

<table>
<thead>
<tr>
<th>Type</th>
<th>Terms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consulting</td>
<td>consulting</td>
</tr>
<tr>
<td>Employment</td>
<td>employer, employee, employment, severance, non competition, termination, management continuity, transition, appointment</td>
</tr>
<tr>
<td>Incentives</td>
<td>pension, stock unit, award, incentive, compensation, management stability, stock option, restricted stock, tax deferred savings, reimbursement, retention, separation allowance, retirement, bonus, dsu, medical plan, benefit, indemnification, health plan, executive plan, savings and investment, stock ownership, restoration plan, performance share, stock retainer, performance plan, management stockholders, indemnity, director stock, directors stock, change in control, change of control</td>
</tr>
<tr>
<td>Joint Venture</td>
<td>joint venture</td>
</tr>
<tr>
<td>Lease</td>
<td>lease, line access, sublease, tenant, landlord</td>
</tr>
<tr>
<td>Legal</td>
<td>settlement, tolling, waiver</td>
</tr>
<tr>
<td>Licensing</td>
<td>license, licensing</td>
</tr>
<tr>
<td>Loan</td>
<td>credit, loan, subordination, borrow, lender, commitment</td>
</tr>
<tr>
<td>M&amp;A</td>
<td>merger, separation and distribution, share exchange, earnout, earn out</td>
</tr>
<tr>
<td>Neg. Instrument</td>
<td>promissory</td>
</tr>
<tr>
<td>Sales</td>
<td>purchase, sale, purchasing, sell, distribution</td>
</tr>
<tr>
<td>Security</td>
<td>security, mortgage, collateral</td>
</tr>
<tr>
<td>Transportation</td>
<td>transportation, precedent</td>
</tr>
</tbody>
</table>

Terms which determine agreement types.

I then extract from the contract all text up to the first occurrence of one
of the words defining the format. Typically, this results in a string that contains only the title of the agreement, such as "Employment Agreement" or "Licensing Agreement". In most other cases, the string contains all text up the point where the agreement is defined in the contract. For instance, in the above example where a contract begins with

This purchasing agreement (this "Agreement") is entered into by and between company A and B (together referred to as "the parties")

the matched string would contain the words "This purchasing agreement" and possibly a preceding table of contents.

The matched string (in lowercase) is scanned for all the terms listed in the above table. If a term is included in the text, an internal "score" of the corresponding contract type is increased by 1. The type of the contract is the type with highest score, though typically, only one of the types receives a score greater than 0.

C. Identification of Forum Selection Clauses

The classification of arbitration clauses exclusively follows a set of manual rules, as arbitration clauses are very easy to identify. For instance, when a known arbitration organization is mentioned in the clause, it will automatically be considered an arbitration clause. Similarly, if the word "arbitration" is part of an enumeration of words of at least 3 items, the others of which do not contain a word starting with "arb", then the clause is deemed not an arbitration clause. That is because the word "arbitration" is often mentioned in a list of legal actions for which a specific consequence is defined in the contract (e.g. "In the event of any litigation, arbitration, mediation or government action, (...)”). The performance of this set of rules is tested against a set of 5,256 hand-coded paragraphs.

The identification of forum selection clauses referring parties to courts is more involved. In order to identify these, I first preprocess the text. The preprocessing consists of the following steps:

i. Break up text into paragraphs

ii. Convert paragraph to lowercase
Stickiness and Incomplete Contracts

iii. Remove punctuation and special characters

iv. Remove stop words

v. Tokenization

vi. Stemming

Step 1-3 are self-explanatory. Removing stop words such as "the", "is", "at" and "which" is a common procedure in natural language processing, because stop words are typically not meaningful in determining the content of a text. To define the stop words that are to be removed, I rely on the "stopwords" corpus of NLTK.

Text tokenization is essentially the process of breaking up a string of characters into analyzable pieces. A unit of analysis can be words, word combinations, sentences or entire paragraphs. Here, the goal is to use tokens to identify whether a clause is a forum selection clause. A useful unit of analysis is each word. I thus tokenize each paragraph into words. Text stemming is the process of removing morphological affixes from words, leaving only the word stem. The idea is that words originating from the same word stem should be treated the same, as morphological affixes are only the product of grammatical rules and conventions which are disassociated from the actual meaning of the word. Stemming is an algorithm-based process that differs from one language to the other. I rely on the popular Snowball algorithm for the English language, included in NLTK.

The following example illustrates the output of the preprocessing procedure:

Before preprocessing: This is a forum selection clause between two companies that defines where disputes are litigated and whether jury trials are permitted. It serves as an example.

After preprocessing: forum select claus two compani defin disput litig whether juri trial permit serv exampl

After preprocessing, I manually define a set of text features indicative of

210 Lohdi 2002. Note that the removal of stop words should depend on the goal of the analysis. For instance, stop words can be useful in identifying the author of a text, because patterns in the use of stop words can vary strongly and consistently from one author to the next. For instance, stop words have been used to identify the original author of disputed federalist papers. See Mosteller 1964.
whether a clause is a court selection clause. In essence, a feature is 
information about the text. Among others, features can help the researcher 
predict whether the document is of a relevant class or not. In theory, anything 
about a token can be a feature, such as information about the first or last letter 
of the token, the occurrence of a particular word within the token, the last 
letter of a word in the token or a combination of multiple tokens. In document 
classification, features should be defined to maximize the accuracy of a 
document's class. I start by allowing every word in a hand-coded sample of 
43,693 paragraphs to be its own feature and create a list of the words most 
predictive of forum selection clauses. I then complement this list using an 
initial set of words typically used in forum selection clauses, based on my 
reading of these clauses. I then again repeatedly test the performance of each 
word feature, keeping highly predictive features and dropping those that are 
not predictive. I also add certain combinations of words to the list of features.

The final list includes the following words and word combinations:

court, forum, irrevoc, proceed, venu, action, jurisdict, 
brought, district, inconveni, object, placeholderst, sit, lay, 
southern, suit, waiv, uncondit, bring, appel, submit, exclus, 
process, fullest, state, heard, recognit, plead, herebi, 
appointe, nonexclus, judgment, arbitration, aris, hereaft, 
borough, convenien, counti, suprem, summon, disput, hereto, 
law, lack, manhattan, parti, settl, (jurisdict, submit), (exclus, 
jurisdict), (jurisdict, disput), (jurisdict, nonexclus), (jurisdict, 
resolv), (jurisdict, venu), (jurisdict, litig), (jurisdict, 
controversi), (jurisdict, referr), (jurisdict, suit), (jurisdict, 
proceed), (jurisdict, forum), (jurisdict, submiss), (arbitr, 
resolv), (submit, exclus), (submit, court), (compet, jurisdict), 
(dispuit, parti), (take, place), (consent, jurisdict), (irrevoc, 
submit), (unit, state, district, court), (exclus, forum), (person, 
jurisdict), (irrevoc, uncondit), (govern, law), (trial, juri, 
waiw), (legal, proceed), (agreement, arbitr), (placeholderst, 
jurisdict), (placeholderst, court), (disput, resolut), (fullest, 
extent, permit, law), (inconveni, forum), (aforement, court), 
(aforesaid, court), (final, judgment), (such, court), (govern, 
author), (waiv, right), (disput, arbitration), (trial, jurisdict, 
waver), (settl, arbitration), (resolv, arbitration), (determin, 
 arbitration)211

211 The feature placeholderst is a place holder included for state names.
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Using these features, I train a naive Bayes classifier to identify court selection clauses, which I supplement with additional manual rules designed to increase accuracy.

Choice-of-law clauses are identified using the word count of a clause as well as a set of manual rules based on the occurrence of the following strings in the unstemmed text:

governing law, law governing, shall be governed by, interpret, construe, govern, governed, governing, the laws, the law

A.V. Area Under the Receiver Operating Characteristic Curve