Innovation Versus Encrustation: Agency Costs in Contract Reproduction

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INNOVATION VERSUS ENCRUSTATION: AGENCY COSTS IN CONTRACT REPRODUCTION

Stephen J. Choi,* Mitu Gulati** & Robert E. Scott***

Abstract

This article studies the impact of exogenous legal change on whether and how lawyers across four different deal types revise their contracts’ governing law clauses in order to solve the problem that the legal change created. The governing law clause is present in practically every contract across a wide range of industries and, in particular, it appears in deals as disparate as private equity M&A transactions and sovereign bond issuances. Properly drafted, the clause increases the ex ante economic value of the contract to both parties by reducing uncertainty and litigation risk. We posit that different levels of agency costs are the motivating factors that influence beneficial innovations in governing law clauses as well as their mirror opposite, costly encrustations. Our data show that lawyers who draft private equity M&A deals pay more attention to the deal terms than lawyers producing corporate and sovereign bond contracts. Because agency costs are low in the private equity setting, we observe significantly more innovation in private equity deals as compared to sovereign and corporate bond transactions where the agency problems of drafting lawyers are much greater. More surprising, we also find that contracts drafted by private equity M&A lawyers have more obsolete and encrusted terms than the contracts of the other deal types. Our conjecture is that the lawyers' dominant drafting strategy is to find examples of a desired term in other documents and import that language verbatim into the contract together with other redundant and obsolete terms including, on occasion, terms that may harm the clients' interests if retained in the contract.

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I.  INTRODUCTION

Over the past decade, multiple studies have suggested that standard form commercial contracts often contain unintelligible and obsolete terms.¹ In addition to the ordinary risks of obsolescence, the repetitious use of a standardized term leads to encrustation: the intelligibility of language deteriorates significantly as legal jargon is overlaid on standard linguistic formulations.² Over time, the clarity and communicative quality of the boilerplate term is undermined. Indeed, it is commonly assumed that the cut and paste boilerplate documents of the bond lawyers who draft these contracts are rife with problems: that is what happens when one blindly copies an aircraft receivables deal into one for ships and forgets to change the word “airport” to “port.” This dynamic of replicating by rote the terms from prior transactions is exacerbated when the contract terms are reproduced largely because the terms are part of the market standard.³ Moreover, plagued by collective action problems, contracting parties and their lawyers fail to react to judicial errors in interpreting these boilerplate terms and are unable readily to convert the boilerplate into new and intelligible formulations.⁴ The end result is that encrusted terms can persist in these boilerplate contracts unchanged for decades providing arbitrage opportunities for market traders who identify uncertain meanings and then exploit the uncertainties in litigation.⁵


⁵ This occurred in 2016 when Argentina settled with arbitrageurs who successfully held out from a restructuring offer after asserting a novel interpretation of the ubiquitous pari passu clause found in almost all sovereign debt contracts. Holdouts from Argentina’s efforts to restructure its debt claimed that the pari passu clause, which provided that “the bonds rank and will rank pari passu in right of payment with all of the Issuer’s present and future unsubordinated
At first glance, this problem may seem endemic to the production efficiencies of standardization that are characteristic of these large, multilateral markets. The very elements of fixed and unchanging meaning that make standardized terms attractive in bond markets are the same elements that can contribute to the erosion of that meaning over time. Moreover, coordination problems are more difficult to solve in large markets where the gains from revising obsolete and encrusted terms are diffused. On this view, the problems of sticky, encrusted terms would not be found, say, in merger and acquisition (M&A) contracts that are bilateral, individually tailored transactions. In this latter environment, the parties can more readily coordinate on revising terms that over time become obsolete or encrusted with jargon. One might think of the attorneys who draft M&A contracts as artisans and the bond lawyers who issue standard boilerplate as workers on an assembly line.6 The artisans craft bespoke contracts whereas the assembly line workers, bound by the constraints of standardization, cut and paste prior deals into new ones.

There is support for the view that M&A contracts are not infected with the problems of encrusted and sticky boilerplate. Research on the evolution of M&A contracts by John Coates suggests that the observed increase in the length of M&A contracts over the years represents innovation rather than encrustation—the rational modification of contracts to deal with hitherto unforeseen contingencies.7 Perhaps, then, there is a different dynamic in environments where the

6 We borrow this dichotomy from Barak Richman, whose 2011 article was at the forefront of urging the study of the contract production process. See Barak D. Richman, Contracts Meet Henry Ford, 40 HOFSTRA L. REV. 77 (2011); see also Eyal Zamir, The Power of Default: Path Dependence in the Drafting of Commercial Contracts, JOTWELL (January 8, 2020) (similar), at https://contracts.jotwell.com/the-power-of-default-path-dependence-in-the-drafting-of-commercial-contracts/.

terms are individually tailored and collective action problems are reduced, if not eliminated. Here, the argument goes, new language appears in these contracts as a function of innovation by rational, sophisticated parties seeking to design their contracts more efficiently to reflect the parties’ commercial bargain.

This view of M&A contracting has been questioned, however, by both academics and practitioners. Robert Anderson and Jeffrey Manns studied the evolutionary patterns showing how language from one contract migrates to another and found evidence of significant inefficiencies in the ways M&A contracts evolve. Glenn West, one of the founders of Weil Gotshal’s private equity practice, suggested that even the finely tailored private equity contracts crafted by M&A attorneys might be infected with encrusted terms. West claimed that frequently there is language in M&A contracts that (perhaps) once served a real purpose, but no longer does, and yet gets ritualistically repeated deal after deal.

We had observed this same phenomenon of inefficient, encrusted terms in our study of the evolution of the pari passu clause in sovereign bonds. Drawing on our prior work and these other observations from West, Anderson and Manns, we conjectured that the evidence of

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8 We also found some evidence of this phenomenon in a prior article comparing innovation rates in private equity M&A deals versus corporate bonds. The former was higher. See Robert E. Scott, Stephen J. Choi & Mitu Gulati, Revising Boilerplate: A Comparison of Private and Public Company Transactions, __ WISC. L. REV. __ (2020).


12 Choi et al., Black Holes, supra note 1.
encrustation was a function of both the costs of coordination in large markets and the presence of agency costs among the contracting parties and their lawyers.\textsuperscript{13} Our study of how agency costs impeded revisions to the \textit{pari passu} clause in sovereign bonds was arguably unusual, however, even in comparison to other sovereign debt provisions. \textit{Pari passu} was a remnant of the era of gunboat diplomacy of the late 1800s, a vestigial term that made no sense in the modern context.\textsuperscript{14} The clause remained in the contract only because it had always been there. But that is not the case with most other provisions in sovereign debt contracts. They do perform some function. West was suggesting, however, that encrustations appear even in bilateral M&A transactions and in the most basic of clauses in a commercial contract such as the ubiquitous governing law provision.\textsuperscript{15}

The governing law clause thus presents an opportunity to test the agency cost hypothesis in an environment where the coordination problems stemming from large market standardization are not present. The governing law clause is present in practically every contract across a wide range of industries and, in particular, it appears in both M&A deals and sovereign bond issuances. Properly drafted, the clause increases the ex ante economic value of the contract to both parties by reducing uncertainty and litigation risk. We posit, therefore, that different levels

\textsuperscript{13} The agency cost problem in sovereign bond issuances implicates two sets of agents. The parties driving the deal on both sides of the transaction -- government officials on the client side and investment bankers on the investor side -- have short-term incentives to get the deals done at the cheapest front-end costs and are not concerned about encrusted boilerplate terms that are only relevant in the low probability event of default. These “client-side” and “investor-side” agents are unlikely to be present when a default occurs. In addition, there are the elite lawyers who negotiate and draft the contracts for the issuers and investors. Their incentives are to process bond issues at the least ex ante cost and as quickly as possible. This single-minded focus on reducing front-end contracting costs is simply a reflection of the fact that the “legal terms” for which the lawyers are responsible and that form the standard boilerplate are seen as immaterial to both sellers and buyers in the initial pricing of the bond. Scott et al., \textit{supra} note 8.


\textsuperscript{15} West called them “sea quirts”, a type of brainless barnacle. Roughly a decade earlier, legendary UK contract and international finance lawyer, Philip Wood, also used the metaphor of barnacles accumulating on a ship’s hull to describe the phenomenon of contractual encrustations. \textit{See} Philip Wood, \textit{Life After Lehman: Changes in Market Practice} (Allen & Overy Publications, 2009), at 9. Key to appreciating the metaphor in the contractual context, Wood explained to one of us some years ago, was the fact that barnacles on ship’s hull can be an enormous source of inefficiency for the ship, but, over time, become extremely hard to remove. \textit{See} Office of Naval Research, \textit{Barnacle Busting: Research Targets Ship Biofouling}, PHYS.ORG (Oct. 13, 2016) (“Individually, tiny barnacles pose little threat to hulking U.S. Navy ships. But when clustered in thick clumps on a vessel’s hull—a natural occurrence called biofouling—these sticky crustaceans can slow the ship and increase its fuel consumption by 40 percent.”) at https://phys.org/news/2016-10-barnacle-ship-biofouling.html
of agency costs are the motivating factors that influence the presence in governing law clauses of costly encrustations and its mirror opposite, beneficial innovations.

Prior research on the topic of contract evolution has focused largely on the dynamics of contract innovation—how, when, and how fast do contracts evolve to respond to changes in states of the world that call for contractual reform. Little attention has been paid to the process by which legal jargon and other verbiage accumulates and when and how to remove costly redundancy. It is this dynamic of encrustation that is a primary focus of this paper. The standard assumption, accepted by legal and economic scholars alike as well as by courts, is that the words in contracts are there because the parties choose them deliberately to communicate their intentions at the time of contracting. It follows, therefore, that words in the contract should be interpreted as if they were intended to have a particular, identifiable meaning.

The possibility that words in contract clauses might instead be the product of the inadvertent accumulation of obsolete or redundant words and phrases is inconsistent with the standard maxim of interpretation that courts should, where possible, give all the words in a contract a distinctive meaning. This maxim is based on the implicit assumption that the contract terms are drafted by parties to communicate a particular intent. To be sure, contemporary courts recognize that some contracts may contain language whose meaning is vague or ambiguous and where extrinsic evidence is necessary to determine the parties’ intentions. But even that assumption does not hold when the transaction is a bespoke M&A contract between two sophisticated parties. There, especially in the commercially sophisticated jurisdictions, courts strive to interpret every term by examining just the words in the contract and assume that variations in the formulation of standard terms implies differences in their meaning. These basic maxims of interpretation stand in contrast with the fact that the production process for the vast majority of commercial contracts involves marginal modifications to boilerplate templates that were not specifically tailored to the deal in question. Thus, the classic assumptions of contract interpretation are in tension with the evidence of how contemporary contract terms are produced.

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16 See Elisabeth de Fontenay, Complete Contracts in Finance, __WISC. L. REV. 531, 541 (2020).
The lawyers who draft contracts are typically agents rather than principals. Other things equal, agents tend to exert efforts to do more of what the principal requires when the principal is more focused on monitoring the agent. In the sovereign debt context, we conjectured that lawyers were remarkably slow to remedy even the most obvious problems in their contract clauses in part because the parties monitoring the lawyers were themselves agents. And, more importantly, those secondary agents (government officials and investment bankers) had short-term incentives to get the transactions done with minimal alteration of the deal templates that had worked before. The true principals, the people of the country on one side and the bond investors on the other side, were not even present at the deal-making stage. This double agency cost in the sovereign bond context led to only episodic changes in the documents and when changes did occur they were meaningless encrustations. Not until a series of court cases that shocked the market on the meaning of the pari passu clause did the entire industry finally coordinate on a move to a wholesale change in the clause.

As a matter of theory, then, we should expect to see a different encrustation/innovation dynamic in bilateral settings where the contracts are more likely to be individually tailored than in multilateral markets where standardized contracts are the norm. This dynamic should be particularly applicable to the drafting of M&A contracts. Put differently, in settings where agency problems are smaller and coordination difficulties are reduced (e.g., M&A deals with concentrated private equity investors) we should observe more rapid changes to contract terms as opposed to settings where agency costs are larger and coordination is more challenging (routine bond issuances where investors are dispersed and often not present at the contract production stage). The rationale is that the principals in the M&A/private equity market have more at stake and are directly involved in the deals. As a result, their lawyer-agents pay more attention to the deal terms. Thus, we expect most of the changes in the M&A context to be economically

17 Within the field of M&A contracting itself, there is a debate over the extent to which contract language is primarily the product of expert lawyering or blind verbatim copying. On the one hand, see John Coates, Darius Palia & Ge Wu, Are M&A Contracts Value Relevant to Bidder and Target Shareholders? (June 2019) (unpublished manuscript) (https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3201235) [https://perma.cc/XQ7U-T8SF]. On the other, see the articles by Anderson & Manns, supra note 10.
beneficial innovations. After all, the parties are sophisticated and their lawyers are motivated to tailor contracts so as to maximize the surplus value of the contract for their clients.

What remains uncertain is whether the active attention to contract drafting in the M&A context means fewer encrustations. Under an ideal model of efficient drafting, where a lawyer revises a contract by hand to state precisely what is meant, more attention to drafting should mean fewer encrustations. Indeed, under this model, there should be no encrustations since revisions will remove vestigial language that erodes meaning. On the other hand, imagine a model of contract drafting where the process relies heavily on verbatim copying of terms found in other contracts. Under this model, linguistic accuracy is traded off against production efficiency. Here, a lawyer who is motivated by her principal to revise a contract carefully to solve a known contracting problem is also likely to add more encrustations, even if she succeeds in solving the problem. By importing terms verbatim from other contracts in order to solve the problem at issue, the lawyer using this drafting strategy is also likely as well to import meaningless jargon. Put differently, the greater rate of change for M&A contracts may introduce a spillover effect, increasing opportunities for unrelated encrustations to appear randomly.

In this study, we set up a horse race across four different deal types over the 2010-2020 time period. Our primary comparison is between private equity M&A, a low agency cost setting, and sovereign bond deals, a high agency cost setting. To those deal types, we add two other sets of contracts—investment grade corporate bonds and sub-investment grade corporate bonds—that we expect to exhibit levels of agency cost between sovereign and private equity M&A deals. Agency costs are arguably lower in corporate bond issues than in the sovereign bond context: the corporate managers, while still agents of dispersed principals, have more at stake personally than the government officials in a sovereign bond deal. However, we expect higher agency costs with corporate bonds issued to dispersed investors than with bilateral, private equity/M&A deals.

To borrow from Rob Anderson and Jeff Mann’s research on contract evolution, we are likely to see both “drift” and “design”. See Anderson & Mann, supra note 10.
In all four of the deal types, there are governing law clauses in the contracts we examine. Importantly, the clause performs the same function in each of the deal types and is impacted by developments in the case law in roughly the same fashion. For example, if a Ninth Circuit case involving automobile franchises in Hawaii interprets the word “construed” in a governing law clause to have a unique and different meaning from what lawyers believed the clause meant, this new interpretation should motivate a modification of the standard language for the governing law clause in both the bond and the M&A contexts. Specifically, the new interpretation should force a choice regarding innovation or encrustation. The lawyers may choose to retain the problematic language to be repeated in the next deal (encrustation), or they may choose to revise the clause and delay closing the deal while a new formulation of the clause is negotiated (innovation).

Our data covers the period 2010 to 2020 and we use a core set of cases and practitioner commentaries that called for a specific revision to the standard governing law clauses during the period of our data as the exogenous events or, collectively, the “legal shock” that should motivate drafting attorneys to revise their governing law clauses. This legal shock enables us to compare responses across the four different deal types for which we collected data. Importantly, the shock should motivate parties to innovate by adding specific terminology that would increase the ex ante value of the governing law clause. A secondary dynamic can also occur if the drafters' response to the shock is to copy language verbatim from other contracts or some standard industry template. In the verbatim copying model of drafting, there is the possibility of spillovers where the contract terms that are more responsive to external shocks also accumulate encrustations. In what follows, therefore, we examine both differences in the rates of innovation across different contract settings as well as differences in the growth of encrusted debris.

The Article proceeds as follows. In Part II we review a recent set of exogenous events that in theory should have motivated an innovative revision in governing law clauses across all of our settings. This Part also collects evidence from the literature of the many encrustations in governing law clauses that have accumulated over time. Part III uses a hand coded dataset to test the hypothesis that the agency problems of drafting lawyers are a prime explanator of the persistence of sticky and encrusted terms in commercial contracts. We find evidence that the governing law clauses in private equity deals where agency costs are lower have both more
innovative terms as well as more encrusted terms as compared with the other deal types. In private equity deals, the legal shock that should motivate lawyers to draft an addition to the clause corresponds to a greater rate of innovation but the legal shock also corresponds to a greater rate of encrustation. Parts IV and V provide additional confirmation that lower agency costs lead to greater contract drafting activity for private equity deals, but that this greater level of activity correlates also with an increase in encrustations.\(^{19}\) Part VI concludes.

II. **INNOVATIONS AND ENCRUSTATIONS**

The standard ex ante understanding of the purpose of a governing law clause in any contract is to reduce contracting costs by providing both parties predictability and certainty as to the applicable law and interpretive styles that will govern in the event of litigation.\(^{20}\) The transactional lawyer presumably selects a jurisdiction with a coherent body of precedent and with courts that understand commercial practice. In particular, sophisticated commercial parties want courts to respect the parties’ shared intent to maximize the expected joint value of their agreements at the time they are made; that is, to give parties the deal for which they negotiated.\(^{21}\)

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\(^{19}\) One might think of private equity M&A contract drafting as similar to a teenager beginning to drive. He drives fast and gets to his destination quickly, but he also hits a lot of inanimate objects along the way and accumulates dents.


\(^{21}\) The interpretive goal in contract cases is to recover and then enforce the parties’ apparent intentions, as they existed at the time of contract. Intention is determined objectively and prospectively: A party is taken to mean what a contract partner could plausibly believe it meant when the parties contracted. Alan Schwartz & Robert E. Scott, *Contract Theory and the Limits of Contract Law*, 113 YALE L.J. 541, 568–70 (2003). This goal is implemented differently, however, depending on the jurisdiction that governs the contract. Many (indeed most) states follow a traditional common law, “textualist” approach to interpretation. Here, when the writing is clear, courts are disabled from inquiring into the context surrounding the contract. In contrast, in states that follow California, and in all states where the subject matter involves the sale of goods under the UCC, the courts are “contextualist.” Here, courts are invited to consider the context regardless of the clarity of the written contract. Thus, the choice of governance clauses implicates a further choice: text or context? For discussion, see Ronald J. Gilson, Charles F. Sabel & Robert E, Scott, *Text and Context: Contract Interpretation as Contract Design*, 100 CORNELL L. REV. 23 (2014);
All of that is to say that the governing law clause is crucially important in any dispute that goes to litigation, because it sets out the rules of the game. Yet, it is the rare transactional lawyer who has much interest in the body of substantive law that determines the legal meanings of the different formulations of a governing law clause. Those differences are governed by conflict-of-laws; a field that, while a key part of any law school curriculum a half century ago, is today often viewed as arcane, complex and of little utility to the practicing lawyer. While transactional lawyers care about which state’s law is selected in the governing law clause, they tend not to pay much attention to the many variations of the clause; let alone try to negotiate over them.

For our purposes, the foregoing features make the governing law clause a good vehicle to study the related phenomena of innovation and encrustation. Because this is a clause that does not address the basic economics of the deal, transactional lawyers will be inclined to give the clause minimal attention—other than to ensure that a widely accepted form of the clause is in the deal contract. It also means that transactional lawyers are unlikely to read the case law that implicates these conflicts issues. John Coyle, the leading expert on governing law clauses, explains why the drafting of these clauses rarely receives adequate attention:

First, most lawyers lack the time to read hundreds of published cases about choice-of-law clauses to identify drafting pitfalls. These lawyers are busy and their clients don’t want to pay for them to undertake this research and so the lawyers (rationally) choose not to undertake it.

Second, most lawyers don’t really understand conflict of laws. It’s a famously complicated body of law and is a class that very few people take in law school. Without a sound doctrinal grounding in conflicts, most lawyers lack the ability to appreciate the significance of small wording changes in a choice-of-law clause.

Third, the choice-of-law clause only really matters when the contract winds up in litigation and the contract touches on more than one jurisdiction and the law is different.

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23 See John F. Coyle, Choice of Law Clauses in U.S. Bond Indentures, 13 Cap. Mkts. L.J. 152, 157 (2018) (“Since both the issuers and the underwriters generally view the ancillary language in the choice-of-law clause as unimportant, this language is virtually never discussed or negotiated.”).
across the two jurisdictions. Since this constellation of factors is rare, most lawyers rationally devote little time to the intricacies of how to draft choice-of-law clauses.24

In what follows, we describe a set of recent events that led to litigation and that provide the basis for our empirical analysis. These case law developments produced uncertainty over the effect of a specific linguistic variation in governing law clauses. We posit that this case law should motivate transactional lawyers who are faithful agents to modify the governing law clause in order to remove the resulting uncertainty. We also analyze common encrustations identified in the literature on governing law clauses that are not directly subject to the legal events we identify.

A. Legal Change and Innovations

“This agreement is governed by the laws of [state X]” is the simplest form of the governing law clause in a commercial contract. Only a handful of the contracts in our database use this basic nine-word version of the clause, even though the language does most of the work that one would require when drafting a governing law clause. Instead, the average length of the clause in our dataset is 168 words, over 18 times the length of the basic clause.25 And most of those extra words are redundant or obsolete verbiage, what we have designated as encrustations.

Yet some of these variations in governing law clauses do create ex ante contractual value by reducing uncertainty and litigation risk. We identify multiple events that occurred during the

24 Email from John F. Coyle, July 12, 2020 (on file with authors).

25 As we discuss more fully below, we compute the length of the governing law clause in a particular deal omitting words referring to the agreement itself such as “This agreement” (referred to as the “trimmed” clause). Sometimes the language identifying the transaction or documents to which the governing law clause applies is longer, such as “The Fiscal and Paying Agency Agreement, the Notes and the Guarantee.” Omitting the words referencing the security or documents in the transaction reduces variations in the clause length not due to variations in the operation of the governing law clause but instead due to variations in the number of securities or documents in the transaction. The comparison between the nine-word basic version of the governing law clause and the mean length for the trimmed clause in our dataset therefore understates how much longer the average clause is compared with the basic version.
time of our study that increased the economic benefit the governing law clause containing one particular variation that we designate as the “non-contractual term.”

**Legal Change and the Non-Contractual Term**

Unlike the simple version of the clause quoted above, a minority of governing law clauses in our dataset begin with the following: “This Agreement, the rights of the parties hereunder and all Actions arising in whole or in part under or in connection herewith, will be governed by….” The “non-contractual term” encompasses phrases that expand the application of the governing law clause to “Actions arising . . . or in connection herewith” or its equivalents “all noncontractual matters arising out of” or “tort and statutory matters arising out of” or any other similar phrases. The legal changes that we describe below measurably increased the value of governing law clauses that contained such a non-contractual term.

In 2017, in *Reid v. Siniscalchi*, the Delaware Chancery Court warned that the typical governing law clause that is silent on non-contractual matters risks the court interpreting the clause not to apply to non-contractual matters such as a claim that there was fraud in the inducement of the contract (if brought as a tort claim). For parties seeking to have all matters relating to their contractual relationship governed by the law of a particular jurisdiction, the *Reid*

26 Another possible innovation related to the governing law clause involves the use of a clause that specifies whether the statute of limitations of the jurisdiction chosen in the governing law clause applies. An example is the following: “The Agreement is governed by the law of the State of New Jersey, including its statute of limitations.” The suggestion that this version of the governing law clause be used appeared in a blog post by Glenn West in 2016, following a 2015 Delaware case, *Pivotal Payments Direct Corp. v. Planet Payment, Inc.*, that held that choice-of-law provisions in contracts do not apply to statutes of limitations unless the choice-of-law provision expressly provides this. See Glenn D. West, *Contractual Choice of Governing Law and Statutes of Limitations—The Law You Choose to Govern Your Contract May Not Be the Law That Governs the Applicable Statute of Limitations for Claims Arising Under or Related to That Contract*, *WEIL INSIGHTS, WEIL’S GLOBAL PRIVATE EQUITY WATCH* (Jan. 12, 2016), http://goo.gl/RIJTDv. Although we do not analyze this innovation in detail in this paper, our preliminary examination found there to be a small magnitude increase (from 0% to 12%) in the use of this innovation near the end of our dataset time period from 2016 to 2020 in private equity deals (and no increase in the corporate and sovereign bonds). As Glenn West explained it to us, the need for this innovation was perhaps not as urgent in many cases as the “non contractual” one that we do analyze since a well drafted forum selection clause fixes the issue at hand. See Email from Glenn D. West (July 17, 2020) (on file with authors).

court explained, the parties needed to specify that non-contractual matters relating to the agreement were also under the contractually specified governing law.\textsuperscript{28}

In 2009, almost a decade prior to the \textit{Reid} case, articles by prominent lawyers, Glenn West and Benton Lewis, partners at Weil Gotshal and Mitchell Geller, a partner at Holland and Knight, made much the same point in widely circulated practitioner journals.\textsuperscript{29} They cautioned drafting attorneys to specify explicitly in the governing law clause that non-contractual disputes arising out of, or relating to, the agreement at hand were to be governed by the same law as that of the contract. From prior work we know that legal cases themselves rarely produce changes to boilerplate language. What is key is for practitioners to coordinate on the desired change.\textsuperscript{30} The articles by prominent lawyers, in two of the most widely circulated practitioner journals – the \textit{Business Lawyer} and the \textit{New York Law Journal} – was such an instance. The admonition was then emphasized in another leading practitioner journal, the \textit{Corporate Counsel}, in 2013, by Eric Fishman and Amanda Freyre, senior practitioners from the Pillsbury law firm. By 2013, then, we think there was accumulation of opinion in the elite bar, clearly communicated to all drafting attorneys, that a change was required, thus forming a focal point around which attorneys could coordinate on the appropriate revision.

Subsequently, there were further interventions in 2016 and 2017 in blog posts by Weil Gotshal’s Glenn West, by law review articles by John Coyle in 2017 and 2018, and a blog post by two Kirkland & Ellis partners, Daniel Wolf and Stefan Atkinson in 2019.\textsuperscript{31} We assume that

\textsuperscript{28} The Delaware courts have been squirrely on this. In 2016, the Delaware Supreme Court implied that it would presume that a generic choice-of-law clause that did not contain the “in connection with” or “related to” language would still be construed broadly to cover tort claims. Hazout v. Tsang Mun Ting, 134 A.3d 274, 293 n.68 (Del. 2016). The court expressly stated, however, that it was not rendering a decision on this issue in the case at hand. The need for clarity in language then gets re-emphasized in a 2019 Chancery court decision, Sheldon v. Pinto (No. 2017-0838-MTZ) \url{https://courts.delaware.gov/Opinions/Download.aspx?id=284490}


\textsuperscript{30} Choi et al., \textit{Black Holes}, \textit{supra} note 1.

the critical signal for change (our “legal shock”) occurred in 2013, but we do not discount the possibility that the *Reid* case and the additional exhortations in blog posts and academic articles in 2017, 2018 and 2019 may have added further pressure for change on the margins.

In what follows, we examine whether this pressure for change resulted in an innovation in the explicit inclusion of a non-contractual term in the governing law clause for our four deal types.

One might surmise that jurisdictional variation in the caselaw could differentially affect parties’ motivation to modify the clause to incorporate non-contractual litigation. This might


32 See materials cited in notes 28 and 31, supra.

33 The West and Lewis 2009 *Business Lawyer* article was not the first mention of the need for lawyers to draft their choice of law clauses broadly. Instead, it drew from a body of already existing case law and was in response to the fact that West and Lewis were frustrated with the failure of practitioners to fix their governing law clauses in response to those prior cases. The cases went back to at least the late 1970s, when courts had suggested that parties who wanted non-contractual matters relating to their contract to be covered by the governing law clause needed to say that precisely. See John F. Coyle, *A Short History of the Choice-Of-Law Clause*, 91 COLO. L. REV. 1147, Section II(D) (2020) (citing and describing the cases). Writing about one of these prior cases, Krock v. Lipsay, 97 F.3d 640, 645 (2d Cir. 1996), Glenn West, in a 2017 blog post, explained:

The standard-variety choice-of-law clause tends not to be “sufficiently broad” and therefore does not expressly include tort claims within its ambit. Indeed, the standard-variety choice-of-law clause tends to be a fairly simplistic provision that reads (similar to the clause at issue in the *Krock* case) as follows: “This Agreement shall be governed by, and construed in accordance with, the law of the State of [ ].”

Glenn D. West, *Making Sure Your “Choice of Law” Clause Chooses All of the Law of the Chosen Jurisdiction*, Harvard Law School Forum on Corporate Governance and Financial Regulation (Sept. 18, 2017), at https://corpgov.law.harvard.edu/2017/09/18/making-sure-your-choice-of-law-clause-chooses-all-of-the-laws-of-the-chosen-jurisdiction/ . Given the foregoing, one might have expected that lawyers would have begun revising their clauses well before 2010 (the start of our data). But research by John Coyle tells us that there was little revision on governing law clauses through the 1980s and 1990s. Coyle, *Short History*, supra note 33 at II(D) (Figure 5).
have been a concern had the two jurisdictions that dominate our dataset, New York and Delaware, taken distinct and different approaches to the issue. However, the uniform warning sent by all of the practitioner and academic articles urging lawyers to reform their clauses was that lawyers in all jurisdictions would be well advised to revise their clauses given the lack of clarity in the background law.\footnote{34 See Fishman & Freyre, \textit{supra} note 31; \textit{see also} materials cited in note 18, \textit{supra}.}

\section{B. Redundant and Obsolete Encrustations}

In addition to the variations from the standard governing law clause that are associated with an identifiable legal change, we also coded for every variation from the standard formulation that appeared in at least [five percent] of one of the four datasets. Unlike the events that motivated the inclusion of the non-contractual term, we do not have either the multiple judicial decisions or the multiple articles by prominent practitioners advising parties to eliminate these variations even though they all erode the clarity and communicative properties of the basic clause. Here, there are no significant exogenous events that might independently motivate parties to revise their clause to eliminate these encrustations. Nevertheless, coding for these superfluous and obsolete phrases amplifies the observed differences in encrustation/innovation rates across the four categories of contracts in our dataset and adds nuance to our story.

\subsection{1. Construed}

It is common for governing law clauses to embellish the basic “governed by the law of [state X]” formulation by substituting “governed \textit{and construed} by the law of [state X].” John Coyle, the leading authority on the history of governing law clauses, explains, however, that there is neither any evidence in the caselaw nor any logical grounds to believe that the addition of the word “construed” would alter a court's subsequent interpretation in any respect.\footnote{35 \textit{See} John F. Coyle, \textit{A Short History of the Choice-of-Law Clause}, 91 \textit{Colo. L. Rev.} 1147 (2020).}
The first version of the governing law clause that Coyle’s historical analysis identifies from the 1860s uses only the words “construed by the law of [state X]” to refer to how the court is supposed to analyze the contract provision in question.\textsuperscript{36} But by the 1970s, court decisions had made it clear that the use of the word “governed by the law of [state X]” was much broader than “construed:” the former selected all of the contract law of the state, while the latter could be read to select just that state's rules of contract construction.\textsuperscript{37} In other words, for at least a half-century it has been clear that there was no benefit to using the word “construed,” if one was already using “governed.”\textsuperscript{38} If anything, “construed” is narrower in meaning than "governed:" The additional word is an encrustation and its effect is to reduce the clarity and intelligibility of the basic clause.

\textbf{2. Interpreted}

Another common variation of the basic governing law formulation is the insertion of the additional word “interpreted.” One variation reads: “the agreement shall be governed by \textit{and interpreted in accordance with} the laws of [state X].” Sometimes, the word “interpreted” is combined with the word “construed” as in this example: “the agreement shall be governed, construed and interpreted in accordance with the laws of [state X].”

As with the word “construed,” the word “interpreted” has been used in governing law clauses as far back as the late 19th century. Indeed, there was even a debate over whether it was preferable for the drafter to use “interpreted” or “construed” since arguably the two words imagine courts engaging in slightly different tasks.\textsuperscript{39} Construction, one might surmise, is about envisioning the contract as a whole whereas interpretation is about determining the meaning of disputed language. Two facts are relevant for our purposes, however: first, by the late nineteenth

\textsuperscript{36} \textit{Id.} at Section II.

\textsuperscript{37} Coyle explains that while most courts will interpret “governed by” and “construed under” in the same broad fashion, some courts have interpreted the latter more narrowly. \textit{Id.} at II(C), n.152 and accompanying text.

\textsuperscript{38} \textit{Id.} at Section II(B).

\textsuperscript{39} See, e.g., \textsc{William F. Elliott}, \textsc{Commentaries on the Law of Contracts} 774 (1913).
century, it was clear that courts were treating the two words as synonyms; and, second, by the 1970s, the case law was clear that the word “governed” superseded both words. Thus, parties received no additional deference from forum courts to the chosen state's law by providing “the agreement shall be governed, construed and interpreted under the laws of [state X].” The word “interpreted,” as used in the typical governing law clause, is an encrustation.

3. Except For Conflict of Laws

A frequently used phrase in the governing law clause addresses the conflict of laws rules of the state whose laws the parties want to govern. This phrase explicitly calls for the application of the law of a given state excluding the conflict of laws rules of that state. For example, lawyers drafting governing law provisions often include, after the core language, “This Agreement shall be governed under the laws of New York,” the additional phrase, “excluding the conflict of laws rules and principles of New York.”

This additional language excluding the conflicts rules is an encrustation. In a 2012 case, IRB-Brasil Resseguros, S.A. v. Inepar Investments, S.A., the New York Court of Appeals explained that the additional conflict of laws language was unnecessary because the court understood the parties intentions without their having to use the additional redundancy.

The conflict of laws language dealt with a risk that might have existed over three-quarters of a century ago. In 1947, the Sixth Circuit in Duskin v. Pennsylvania-Central Airlines Corp., interpreted the choice of a jurisdiction’s law to include a choice of that jurisdiction’s conflicts

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40 Coyle, Short History, supra note 33 at Section II(B & C); Dwight Arven Jones, Construction or Interpretation of Commercial and Trade Contracts 3 (1886).

rules, which actually stipulated that the law of another jurisdiction would apply.\textsuperscript{42} \textit{Duskin}, however, was an isolated case, as dozens of subsequent decisions have made clear. The dominant canon of construction since 1947 is that courts will read a choice of law provision to select all of the jurisdiction’s internal laws and not those conflicts rules that look to some other jurisdiction’s law.\textsuperscript{43} If parties want more or less, they have to say so.

The Second Restatement of Conflicts endorsed this view over fifty years ago, stating explicitly that the basic governing law clause was a choice of the chosen state’s internal law:

When they choose the state which is to furnish the law governing the validity of their contract, the parties almost certainly have the [internal law] rather than the [whole law] of that state in mind.\textsuperscript{44} To apply the [whole law] of the chosen state would introduce the uncertainties of choice of law into the proceedings and would serve to defeat the basic objectives, namely those of certainty and predictability, which the choice-of-law provision was designed to achieve.\textsuperscript{45}

To reiterate then, the language excluding the jurisdiction’s conflicts of law rules and principles is an encrustation. The additional words have not added value for at least a half century. The conflicts of law language does not appear to present any danger to the party who

\begin{footnotesize}
\begin{enumerate}
  \item[	extsuperscript{43}] Id.
  \item[	extsuperscript{44}] “Whole law” is a term of art in the conflicts literature that refers to all of the state’s law – internal and conflicts based. Id. at 643.
  \item[	extsuperscript{45}] The Second Restatement of Conflicts was finalized in 1969 (and circulated), but was officially published in 1971. See \textit{Restatement (Second) of Conflict of Laws} § 187(3); id. at cmt. h. Ironically, it is the clarification provided by the Second Restatement that this extra wording was no longer necessary that seems to have resulted in its initial popularity. According to John Coyle’s research, the 1947 Sixth Circuit case resulted in no governing law clauses containing exclusions for “conflicts of laws rules or principles” or specifying that the governing law intended to use only the state’s “internal” law, until 1970. That is, only after the Restatement said that this caveat to the basic clause was not needed. See Coyle, \textit{A Short History}, supra note 33 at II(E).
\end{enumerate}
\end{footnotesize}
uses it, but the encrustation lengthens the governing law clause, making the clause as a whole more confusing and difficult to understand.\textsuperscript{46}

4. Except for Choice of Law

Governing law clauses will sometimes contain not only an exclusion of the jurisdiction’s conflict of laws rules, but also a purported exclusion of the jurisdiction’s choice of law rules. We have previously discussed the potential costs of adding the phrase “except for [state X’s] conflict of law rules.” Some drafting lawyers further encumber the governing law clause by providing “except for [state X’s] conflicts of law or choice of law rules.” The additional words add absolutely nothing of substantive meaning since they are essentially synonymous. After all, the choice of law occurs within the structure of a conflict where a choice needs to be made. This redundancy creates unnecessary and costly uncertainty; a rational interpreter will strive to develop a nuanced meaning that differs from the single reference to "conflicts of laws” based on the reasonable assumption that the additional words were included in order to signal a different intention. This encrustation weakens the communicative properties of the standard governing law clause, reducing its reliability as an indication of what the parties really intend.

5. Internal/Domestic

Another variation on the “excluding conflict of laws” encrustation provides that the contract is governed by the “internal” or “domestic” law of the chosen state. As explained above, there is no reason to include this additional verbiage. By stating that the contract is “governed by the law of [state X]” the court understands that it is to apply the internal or domestic laws of the state (and equally understands that the parties do not want a foreign state law to apply, unless they so specify).

\textsuperscript{46} This is particularly so if one digs deep since these additional words produce a circularity. The conflicts of law rules of a state, after all, are the very rules that allow parties to select their governing law clause. Read strictly, the exclusion of the conflicts rules of the state could render the governing law clause a nullity, which presumably the parties did not intend. See Michael Gruson, \textit{Governing Law Clauses Excluding Conflicts of Laws}, 37 \textit{Int’l Law} 1023, 1030 (2003).
The source of this “internal/domestic” qualification is found in the classic treatises on conflicts of laws from the early twentieth century.\textsuperscript{47} In the context of describing the distinction between jurisdictions that mandated applying their entire law (that is, domestic law plus conflicts rules) and those that allowed parties the autonomy to choose governing law, treatises often used the language of internal versus entire law.\textsuperscript{48} But given the default understanding that contracting parties intend the basic “governed by the law of [state X]” clause to apply to the jurisdiction’s internal or domestic laws, the use of the words “internal” or “domestic” are a redundancy and thus an encrustation.

\textbf{6. Substantive/Procedural}

On occasion, governing law clauses will explicitly choose the “substantive” law of a jurisdiction. “Substantive” law, however, is what contracting parties receive when they choose to have their contract governed by the law of a particular jurisdiction using the basic form of the governing law clause. Indeed, as noted above, there is caselaw that makes clear that the basic form of the governing law clause directs the contract to be governed by the selected state's substantive contract law, but not its procedural law.\textsuperscript{49} Thus, parties may not automatically receive the chosen state's procedural rules. In short, providing that the agreement is “governed by the law of [state X]” is the same as stating that the agreement is “governed by the substantive law of [state X]”. The redundant word “substantive” used here is just another encrustation.\textsuperscript{50}

\textbf{7. Made and Performed}

\textsuperscript{47} Gruson, \textit{supra} note 46 at 1025 (2003). For treatments of this matter from the early part of the twentieth century, when it appears to have been a topic of debate, see John D. Falconbridge, \textit{Characterization in the Conflict of Laws}, 53 L. Q. REV. 235, (1937); Joseph M. Cormack, \textit{Renvoi, Characterization, Localization and Preliminary Question in Conflicts of Laws}, 14 S. CAL. L. REV. 241 (1941).


\textsuperscript{49} See text accompanying notes \_\_ to \_ supra.

\textsuperscript{50} Professor Little suggests that parties sometimes use the term “ substantive” as a substitute for “ internal”, stating that the contract is “ governed by the substantive law of [state X]” instead of “ governed by the internal law of [state X].” Little, \textit{supra} note 22 at 256. Both words are encrustations that increase contracting costs by reducing intelligibility.
Governing law clauses sometimes include phrases such as: “This Agreement is governed by the law of [state X] as applicable to agreements made and performed in [state X].” As John Coyle’s history of the governing law clause explains, the language “made and performed” made sense in governing law provisions from a century ago. Before parties were permitted to select the governing law for their contracts (roughly, pre-1950s), courts would apply a multi-factor test to determine what law should apply. And two of the key factors were where the contract was made and where it was to be performed. Thus, parties would often specify where the contract was made and performed to reduce the risk of judicial errors in determining the applicable law.

Since parties are now entitled to specify the governing law independent of where the contract was made or performed, the additional language is now obsolete unless the parties elect not to specify a governing jurisdiction in the contract (an option that was not chosen by any of the parties in our database). Nevertheless, the “made and performed” language has managed to survive, with the even more verbose modern formulation specifying that the contract is “governed by the law of [state X] as applicable to agreements made and performed in [state X].” On its face, the language directs the court to apply the law of the state in which the contract was made and performed which may contradict the desire to have the contract governed by the law of the selected state. No doubt most courts can decipher the parties intentions without great difficulty. But undeniably, the “made and performed “phrase is another encrustation: the lack of clarity is a cost that increases the risk of strategic claims in litigation.

8. Validity

51 See Coyle, Short History, supra note 33 at II(A).

52 Id.

53 Id.

54 A subset of governing law clauses state that the agreement is to be governed by the law of X as applicable to contracts either “made, performed and executed in [state X]” or “executed and performed in [state X]”. The addition of the redundant word “executed” further erodes the meaning of the clause.

55 See Gruson, supra note 46 at 1029.
A small set of governing law clauses specify explicitly that matters of the contract’s “validity” will be governed by the law of [state X]. The background here is that the law in most U.S. jurisdictions is not clear on whether the choice-of-law provision of a contract covers matters of validity – questions such as whether there was adequate consideration given, proper manifestation of assent, authorization, and so on. Since these matters are, in a sense, pre contractual in that they help determine whether a contract was formed in the first place, some courts and commentators take the view that the law of the litigation forum governs, independent of what the contract says.  

Thus, a specification in the contract that the law of [state X] governs is irrelevant for matters of validity regardless of whether the additional word is used. To be sure, some courts do suggest that the choice-of-law provisions can govern some matters of validity as well. This issue appears to arise in contexts where the parties are disputing the validity of specific aspects of the contract (such as whether a guarantee was validly authorized by a board of directors). Here, the contractually chosen governing law is used to determine the outcome. But the outcome in these latter cases is not determined by whether the governing law clause explicitly mentions that it covers matters of validity. So, under either perspective, specifying that determinations of the contract’s validity will be under the governing law of [state X] is a further encrustation.

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In the next Part, we analyze our data on the foregoing variations to the standard governing law clause, comparing the rates of innovation and encrustation across four distinct practice settings. In all of the contexts discussed above, whether deleting a costly encrustation or


inserting a beneficial innovation, interviews with market participants suggest that no counterparty would have objected to the changes on substantive grounds. For drafting lawyers aware of the respective costs and benefits of changing the clause, the costs of adding or subtracting words are solely the minimal transaction cost of editing the document. The four different contractual settings where we examine drafting responses to case law developments permits us to better understand how differences in agency costs affect the drafting process.

III. Testing Agency Cost Influence on Responses to Legal Shocks

A. The Dataset

We collected information from Perfect Information and Westlaw’s What’s Market database on the governing law clause for the four types of deals. We focused only on deals governed by a U.S. law jurisdiction. For the sovereign, low yield, and high yield deals, the U.S. jurisdiction was invariably New York. Most of the private equity deals chose Delaware law, but a small fraction used other jurisdictions including New York. Given that the drafting advice in the practitioner literature invariably applies to contracts used in all U.S. jurisdictions, we treat contracts drafted under different U.S. jurisdictions as the same for purposes of our analysis.58

We collected data on deals from 2010 to early 2020. We started our dataset in 2010 because Westlaw’s What’s Market database does not have data on private equity M&A deals available prior to 2010. For each deal type, we collected information on approximately 25 to 30 deals in each year, where available, selected at random. Some years had less than 25 total observations due to a lack of available deals. In some cases, multiple observations selected at random were for the same deal name and date and we deleted the duplicate observations. Table 1 details the number of deals for each deal type by year.

58 For our private equity deals, 48.8% of the deals in our dataset chose Delaware law; 26.1% chose New York law. We compared the mean incidence of the different terms we study for Delaware versus New York law governed private equity deals. Unreported, none of the differences in mean incidence for the terms for Delaware versus New York was significantly different from zero.
Table 1

<table>
<thead>
<tr>
<th>Year</th>
<th>Private Equity</th>
<th>Sovereign</th>
<th>Low Yield</th>
<th>High Yield</th>
<th>Total</th>
</tr>
</thead>
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<tr>
<td>2010</td>
<td>26</td>
<td>21</td>
<td>25</td>
<td>24</td>
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<tr>
<td>2011</td>
<td>27</td>
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<td>Total</td>
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<td>224</td>
<td>272</td>
<td>272</td>
<td>1,058</td>
</tr>
</tbody>
</table>

B. Hypothesis: Private Equity Lawyers Will Add Terms but May Not Delete Any

We test whether contracts in private equity deals with lower agency costs have more additional terms in the governing law clause compared with other deals. We expect private equity deals to have more terms at the beginning of our dataset period than other deals: a greater attention to drafting and a disposition to modify the governing law clause would result in the accumulation of changes over the years prior to our dataset. This would be so if drafting lawyers in general pursue the verbatim copying model referenced above which implies a preference for addition rather than deletion whenever a clause is revised. Consistent with that model, we expect the lawyers in private equity deals to be more responsive than lawyers in the other deals to the caselaw and related events that should have motivated a revision in the governing law clause, but the nature of that response may not be consistent.

For the legal shock that would motivate faithful agents to innovate by adding the non-contractual term to the governing law clause, we expect an increase in these terms for private equity deals relative to other deals. The legal changes affecting the utility of the non-contractual
term were the most salient events during our dataset time period, stemming from the fact that there were many more articles and cases addressing this matter than any other aspect of the governing law clause. Based on the analysis above, we conjecture that private equity lawyers seeking to add a non-contractual term to the governing law clause in response to the extensive articles and case law will likely not draft a new term from scratch but instead will copy the term verbatim from an older contract or a commercially available model form. Lawyers using this drafting strategy will not only copy the non-contractual term but also other language from the model contract potentially including the conflicts of law term, leading both terms to migrate into the governing law clause.

C. The Non-Contractual Term

We start with a comparison of the non-contractual term for our four types of deals. A series of events affected the market’s view of the non-contractual term over the period of our study. Our hypothesis is that the lawyers drafting private equity deals, having lower agency costs, will be the most responsive to the events (both before and during our dataset time period) that highlighted the value of adding the non-contractual term to the governing law clause. As discussed above, the West/Lewis and Geller articles in 2009 first noted the value of adding a

59 See materials cited in notes 28 and 31, supra.

60 A recent development in contract drafting has been the emergence of commercial entities that market widely used formulations of standard contract terms. While their algorithm is not publicly available, the selection of “best practice” seems to turn on the extent to which particular language is widely used in the market rather than on a scholarly analysis of the formulation that would convey the best possible meaning for the contracting parties. One version of such a program is Draft Analyzer on Bloomberg Law. Bloomberg’s description of what the program does is as follows:

Draft Analyzer uses an algorithm to show you the developing consensus among drafters based on its analysis of each paragraph from virtually every agreement and organizational document filed as an EDGAR exhibit. Our system first categorizes each paragraph based on textual similarity and constructs one or more unified versions (“composites”) for each identified cluster of similarly worded paragraphs. A composite reflects the most common language in its underlying source documents.


non-contractual term, followed by the Fishman/Freyre article in 2013, the *Reid* case in 2017 and articles and blog posts by West, Coyle and others in 2017, 2018 and 2019.

Figure 1 depicts the yearly fraction of deals with the non-contractual term for each deal type. Note that the graphs indicate a higher initial incidence for the non-contractual term in private equity deals compared with the other deals. This higher incidence is consistent with greater attention in private equity deals to the non-contractual term prior to our dataset period.

![Figure 1](image)

Looking at the change over time for the non-contractual term, a substantial increase in the incidence of the term in private equity deals occurs over our sample time period. Only 15% of private equity deals in 2010 had a non-contractual term compared with 50% in 2020. This change is consistent with lower agency costs in private equity deals leading to greater responsiveness to an exogenous legal shock in contract drafting.
In comparison, the other three types of deals start with a lower fraction of clauses containing the non-contractual term at the beginning of our sample period. In the case of sovereign deals, only 10% of the deals have the non-contractual term in 2010. Only 4% of high yield and 0% of low yield deals have the non-contractual term in 2010. The lower initial incidence of the non-contractual term for the other types of deals compared with private equity deals is consistent with a greater willingness on the part of contracting parties and their attorneys in private equity deals to modify the governing clause prior to the start of our dataset time period, possibly in response to the 2009 West and Lewis Business Lawyer article.

The fraction of deals with the non-contractual term in the other three types of deals does not increase appreciably (if at all) from 2010 to 2020. For both sovereign and high yield deals, 0% of the deals in 2020 have the non-contractual term. Only 5% of the deals for low yield bond issuances have the non-contractual term. The legal change affecting the market’s view of the non-contractual term should have increased the motivation of parties and their attorneys in all deal types to add the non-contractual term. Note, however, that while the decrease is statistically significant for the low yield deals, the magnitude is not large compared with the increase in the incidence of the non-contractual term for the private equity deals. The vast majority of non-private equity deals across our entire dataset period simply continued to omit the non-contractual term altogether. The lack of any increase in the non-contractual term in these deals is consistent with the hypothesis that the absence of effective monitoring of the drafting efforts of lawyers for such deals leads to greater agency costs. As a consequence, the drafting attorneys continued their prior practices across our dataset period without regard to the legal events that increased the economic value of adding the non-contractual term.

D. Multivariate Analysis

In our multivariate test, we estimate a linear probability model for the probability of a non-contractual term in the governing law clause for a deal. The model is as follows.

\[
\text{Prob(Non-Contractual}_i) = \alpha + \beta_1 \ln(\text{Deal Amount}) + \beta_2 \text{Private Equity}_i + \text{Year Effects} + \varepsilon_i
\]
For independent variables we include a control for the log of the deal amount (\(\ln(\text{Deal Amount})\)). It is possible that parties and their lawyers will invest more effort in drafting the contract for larger deals. We include an indicator variable for a private equity deal (Private Equity), comparing private equity deals against the other three types of deals in our dataset. As discussed above, we did not observe appreciable differences between the three other deal types. Accordingly, we compare private equity deals against the three other types combined. We include year fixed effects. We estimate the model using ordinary least squares with errors clustered by the issuer, or in the case of an acquisition, the acquirer. Model 1 of Table 2 reports the results of the model.

To test the impact of the events that affected the salience of the non-contractual term, we add to Model 1 an indicator variable for the period from 2013 to 2020 (2013 Onward). The base category is the pre-2013 period from 2010 to 2012. As we discuss above, there are multiple events that affected the market’s perception of the value of the non-contractual term that we use collectively as the “shock” affecting the market’s perception of the non-contractual term. Immediately before the start of our dataset (2009), Glenn West, Benton Lewis and Mitchell Geller published two articles in leading practitioner journals on the ex ante value of the utilizing the non-contractual term. That was followed by a third article in 2013 in a practitioner journal by Eric Fishman and Amanda Fryre. We select 2013 as the first year during our dataset time period when there is explicit practitioner attention, in the form of the Fishman and Fryre article, on the non-contractual term. As we found in our prior research, the collective attention of practitioners, rather than court cases, is important in initiating a change in boilerplate contract terms like the governing law clause.\(^62\) In part, we suspect that this is so because transactional lawyers do not devote a great deal of time keeping up with the case law.\(^63\) But it also may be because they are

\(^62\) Choi et al., *Black Holes*, supra note 1.

\(^63\) In explaining to us the reasons why, in his experience, transactional lawyers do not quickly respond to the case law and revise their governing law clauses, one of the four reasons Professor Coyle gave was:

> [Transactional] lawyers as a general rule don't read cases or go to court. This means that the people drafting choice-of-law clauses are unlikely to come across published decisions that could inform their drafting choices.

Email From John F. Coyle, July 12 (2020) (on file with authors).
waiting for a signal that the collective is ready to move to a new term; a signal that they would receive when multiple articles by leading practitioners are published in the foremost practitioner journals around the same time.\textsuperscript{64}

It is possible that practitioners had already started shifting toward using the non-contractual term in response to the 2009 articles—because we were unable to collect data on private equity M&A deals prior to 2010 we are unable to test for this. Our test examines whether the cumulative effect of the 2009 articles and then the 2013 Fishman and Frye article initiated a shift in the market toward the non-contractual term that cumulated with the Reid case in 2017 and additional articles and blog posts by practitioners in 2017, 2018 and 2019. We also add to Model 1 an interaction term between Private Equity and 2013 onward to assess whether a higher incidence of non-contractual terms correspond with private equity deals in the post 2013 period. Model 2 of Table 2 reports the results of the model.

\textbf{Table 2: Linear Probability Model for Non-Contractual} 

<table>
<thead>
<tr>
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<th>Model 2 Non-Contractual</th>
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</thead>
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<td>0.0291**</td>
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<tr>
<td></td>
<td>(3.86)</td>
<td>(3.54)</td>
</tr>
<tr>
<td>Private Equity</td>
<td>0.356**</td>
<td>0.181**</td>
</tr>
<tr>
<td></td>
<td>(11.07)</td>
<td>(3.78)</td>
</tr>
<tr>
<td>2013 Onward</td>
<td></td>
<td>0.0221</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.47)</td>
</tr>
<tr>
<td>Private Equity x 2013 Onward</td>
<td>0.238**</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(4.37)</td>
</tr>
<tr>
<td>Constant</td>
<td>-0.667**</td>
<td>-0.552**</td>
</tr>
<tr>
<td></td>
<td>(-3.81)</td>
<td>(-3.21)</td>
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<tr>
<td>Year Effects</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>( N )</td>
<td>1008</td>
<td>1008</td>
</tr>
<tr>
<td>( \text{adj.} R^2 )</td>
<td>0.237</td>
<td>0.260</td>
</tr>
</tbody>
</table>

\( t \) statistics in parentheses; \( ^{+} p < 0.10, ^{*} p < 0.05, ^{**} p < 0.01 \).

Note from Model 1 of Table 2 that the coefficient on Private Equity is positive and significant at the 1\% level. Compared with the three other deal types, private equity deals

\textsuperscript{64} Scott et al., \textit{Revising Boilerplate, supra} note 8.
correspond to a 35.6 percentage point increased probability of a non-contractual term in the governing law clause. This is consistent with lower agency costs in private equity deals leading to a greater usage of the non-contractual term.

Model 2 addresses whether private equity deals are more responsive to the multiple events affecting the non-contractual term. Note from Model 2 of Table 2 that the coefficient on Private Equity is positive and significant at the 1% level. Private equity deals in the pre-2013 period corresponded with a 18.1 percentage point increase in the probability of a non-contractual term compared with the other deal types. The coefficient on Private Equity x 2013 Onward is positive and significant at the 1% level and the sum of 2013 Onward and Private Equity x 2013 Onward is positive and significant at the 1% level. The difference in the probability of a non-contractual term between private equity and non-private equity deals increased in the 2013 Onward period by 23.8 percentage points. This relative increase in the probability of a non-contractual term for private equity deals is consistent with lower agency costs (i.e., increased monitoring) and thus a greater responsiveness by lawyers to the signals of legal change involving the non-contractual term in our study time period.\footnote{We re-estimated the models in Table 2 with a logistic regression model. Unreported, we obtained the same qualitative results as in Table 2.}

We focus on 2013 as the year that the series of practitioner articles from 2009 and 2013 culminated to form a focal point for coordination. As we discuss above, it is possible that the Reid case and articles and blog posts in 2017, 2018, and 2019 may have added pressure for change. To test this possibility, we add an indicator variable for the 2017 to 2020 period (2017 Onward) to Model 2 of Table 2. We also add an interaction between Private Equity and 2017 Onward. Unreported, we obtain the same qualitative results as in Model 2 of Table 2. The coefficient on Private Equity x 2013 Onward is positive and significant at the 1% level and the sum of 2013 Onward and Private Equity x 2013 Onward is positive and significant at the 5% level. In addition, the coefficient on 2017 Onward is not significantly different from zero, consistent with no shift for the non-Private Equity deals in the 2017 Onward period. The coefficient on Private Equity x 2017 Onward and the sum of 2017 Onward and Private Equity x 2017 Onward are positive and significant at the 5% and 10% levels respectively. Evidence exists
that the use of the Non-Contractual term in private equity deals increased not only from 2013 onward but also, incrementally, from 2017 onward. The difference in the probability of a non-contractual term between private equity and non-private equity deals increased in the 2017 Onward period by 15.0 percentage points.

As another robustness test, we divide our dataset between the 2010 to 2014 period (pre 2015 period) and the 2015 to early 2020 period (2015 Onward), roughly splitting our dataset in half. If there is a cumulative and increasing effect from the events over the period of our study, then we expect the incidence of the non-contractual term to be higher in the 2015 Onward period compared with the pre 2015 period. We re-estimate Model 2 of Table 2 substituting 2015 Onward for 2013 Onward. Unreported, we find a similar increase in the use of the non-contractual term PE deals in the 2015 Onward period as in Model 2. The coefficient on Private Equity x 2015 Onward is positive and significant at the 1% level and the sum of 2015 Onward and Private Equity x 2015 Onward is positive and significant at the 1% level. The difference in the probability of a non-contractual term between private equity and non-private equity deals increased in the 2015 Onward period by 24.7 percentage points.

IV. ADDITIONAL EVIDENCE SUPPORTING THE AGENCY COSTS STORY

A. An Analysis of the Number of Words

Our next test looks at the number of words in the governing law clause as a measure of the overall complexity of the clause. Complexity in turn corresponds to the cumulative amount of attention attorneys have spent on a clause. Our hypothesis is that attorneys who are attentive to making changes are more likely to add language to a clause than remove it. Past usage is continued because lawyers see no reason to eliminate a term they view as costless and thus incur a risk, however small, of jeopardizing the market's standard meaning of their agreement. That dynamic should then result in the growth of the clause over time. Put differently, the length of a clause in words provides us with a measure of how often the clause has been modified, much like rings on a tree measure the lifespan of the tree. Looking at the number of words in the governing
law clause across different categories of deals, therefore, can identify which types of deals involve the most active changes to the contract clause as well as when these changes occur.

Figure 2 depicts the number of words for the governing law clause for our four deal types by year.

![Figure 2](https://ssrn.com/abstract=3653463)

Note from Figure 2 that the mean number of words in the governing law clause in private equity deals is significantly higher than for the other deal types. The difference between the mean number of words for private equity deals (308) and the other deal types (115) is significant at the 1% level. Focusing on private equity deals, we observe a significant shift in the number of words in the pre-2013 period (258) to the 2013 Onward period (327) (difference significant at the 1% level). The series of events involving the non-contractual term correspond to an increase
in the number of words in the governing law clause for private equity deals, consistent with greater complexity and attention paid to these clauses over our study time period.

As a multivariate test, we estimate an ordinary least squares model for the number of words (Number of Words) in the governing law clause for a particular deal. The model is as follows.

\[
\text{Number of Words}_i = \alpha + \beta_1 \ln(\text{Deal Amount}_i) + \beta_2 \text{Private Equity}_i + \text{Year Effects} + \epsilon_i
\]

For independent variables we include a control for the log of the deal amount (\(\ln(\text{Deal Amount})\)). It is possible that parties and attorneys will invest more effort in drafting the contract for larger deals. We include an indicator variable for a private equity deal (Private Equity), comparing private equity deals against the other three types of deals in our dataset. We include year fixed effects. We estimate the model using ordinary least squares with errors clustered by the issuer, or in the case of an acquisition, the acquirer. Model 1 of Table 3 reports the results of the model.

To test the impact of the multiple events that affected the salience of the non-contractual term, we add to Model 1 an indicator variable for 2013 Onward. The base category is the pre-2013 period. We also add to Model 1 an interaction term between Private Equity and 2013 Onward to assess whether the number of words increased in the 2013 Onward period for private equity deals relative to the other deal types. Model 2 of Table 3 reports the results of the model.
Table 3: Number of Words

<table>
<thead>
<tr>
<th></th>
<th>Model 1 Number of Words</th>
<th>Model 2 Number of Words</th>
</tr>
</thead>
<tbody>
<tr>
<td>ln(Deal Amount)</td>
<td>18.00**</td>
<td>17.17**</td>
</tr>
<tr>
<td></td>
<td>(4.47)</td>
<td>(4.21)</td>
</tr>
<tr>
<td>Private Equity</td>
<td>212.0**</td>
<td>167.3**</td>
</tr>
<tr>
<td></td>
<td>(19.09)</td>
<td>(11.27)</td>
</tr>
<tr>
<td>2013 Onward</td>
<td></td>
<td>33.85</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(1.62)</td>
</tr>
<tr>
<td>Private Equity x 2013 Onward</td>
<td></td>
<td>60.58**</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(3.27)</td>
</tr>
<tr>
<td>Constant</td>
<td>-264.4**</td>
<td>-235.1**</td>
</tr>
<tr>
<td></td>
<td>(-3.29)</td>
<td>(-2.89)</td>
</tr>
<tr>
<td>Year Effects</td>
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<td>Yes</td>
</tr>
<tr>
<td>N</td>
<td>1011</td>
<td>1011</td>
</tr>
<tr>
<td>adj. $R^2$</td>
<td>0.421</td>
<td>0.428</td>
</tr>
</tbody>
</table>

$t$ statistics in parentheses; *, $p < 0.10$, *, $p < 0.05$, **, $p < 0.01$.

Note from Model 1 of Table 3 that the coefficient on Private Equity is positive and significant at the 1% level. Compared with the three other deal types, private equity deals correspond to 212 more words in the governing law clause compared with the other deal types. Lower agency costs in private equity deals correspond with greater overall number of words in the governing law clause.

Note from Model 2 of Table 3 that the coefficient for Private Equity is positive and significant at the 1% level. Private equity deals in the pre-2013 period correspond to 167.3 more words in the governing law clause compared with other deals. This is consistent with lower agency costs for private equity deals leading to a greater overall level of complexity in the governing law clause—indicating greater cumulative attention by the attorneys in such deals. The coefficient on the interaction between Private Equity x 2013 Onward is also positive and significant at the 1% level, corresponding with a greater increase 60.6 more words) in the 2013 Onward period for Private Equity compared with the other deal types. The sum of 2013 Onward and Private Equity x 2013 Onward is also positive and significant at the 1% level. This is consistent with greater attorney attention in private equity deals following the non-Contractual...
term legal events affecting the overall length of the governing law clause, indicating increased contract drafting activity on the clause.

To test this possibility that the Reid case and articles and blog posts in 2017, 2018, and 2019 may have added pressure for change, we add an indicator variable for the 2017 to 2020 period (2017 Onward) to Model 2 of Table 3. We also add an interaction between Private Equity and 2017 Onward. Unreported, we obtain the same qualitative results as in Model 2 of Table 3. The coefficient on Private Equity x 2013 Onward is positive and significant at the 5% level and the sum of 2013 Onward and Private Equity x 2013 Onward is positive and significant at the 5% level. In addition, the coefficient on 2017 Onward is not significantly different from zero, consistent with no shift for the non-Private Equity deals in the 2017 Onward period. Neither the coefficient on Private Equity x 2017 Onward nor the sum of 2017 Onward and Private Equity x 2017 Onward are significantly different from zero. We do not find evidence that the number of words in the governing law clause increased incrementally for private equity deals from 2017 onward.

As another robustness test, we divide our dataset between the 2010 to 2014 period (pre 2015 period) and the 2015 to early 2020 period (2015 Onward). We expect the number of words in the governing law clause to be higher in the 2015 Onward period compared with the pre 2015 period for private equity deals if attorneys paid more attention to the governing law clause in response to the events related to the non-contractual clause. We re-estimate Model 2 of Table 3 substituting 2015 Onward for 2013 Onward. Unreported, we find a similar increase in the number of words in the governing law clause for PE deals in the 2015 Onward period as in Model 2. The coefficient on the interaction between Private Equity x 2015 Onward is also positive and significant at the 1% level, corresponding with a greater increase 77.9 more words) in the 2015 Onward period for Private Equity compared with the other deal types. The sum of 2015 Onward and Private Equity x 2015 Onward is also positive and significant at the 1% level.

B. Analysis of Encrustations
The governing law clauses in our dataset contain encrustations that were not affected by any legal change during our study period. These include terms that use phrases that refer to “construed”, “interpreted”, “conflicts of law”, “choice of law”, “internal domestic”, “substantive”, “made and performed”, “executed” and “validity”. To get a sense of the total amount of encrustations in the governing law clause, we count the number of encrustations in the governing law clause for each deal in our dataset (termed “Other Encrustations”).

We test the two opposing hypotheses on how lower agency costs affect the rate of encrustations. First, lower agency costs may lead to fewer encrustations as those lawyers charged with drafting contracts and who are more carefully scrutinized by their clients remove redundant and costly encrustations over time. Second, by their very nature encrustations appear as innocuous additions to a clause at least at the time they are first introduced into the legal marketplace. Lower agency costs may not only lead to a greater propensity for contracts to adopt value-increasing terms but also to a greater motivation to further modify the contract, leading to spillover encrustations. An attorney using the verbatim copying strategy to revise a contract in order to add value-enhancing terms will first look for examples of standard formulations of the new term found in forms supplied by commercial entities as well as in precedents found in older contracts. The cut-and-paste process that follows this search for the best formulation may cause encrustations in the sample versions of the clause to be added to the contract along with the new value-increasing term. Under this second hypothesis, lower agency costs correspond to a greater frequency in the reproduction of pre-existing templates and thus they also can lead to more encrustations.

Figure 3 depicts the number of encrustations for each deal type in our dataset by year.
Note from Figure 3 that the overall level of encrustations for Private Equity is roughly twice as high as that for other deal types. The difference between the mean number of encrustations for Private Equity (2.7) and the other types (1.0) is significant at the 1% level. Focusing on private equity deals, we observe a shift in the number of encrustations in the pre-2013 period (2.5) to the 2013 Onward (2.8) period (significant at the 5% level).

As a multivariate test, we estimate an ordinary least squares model for the number of encrustations in the governing law clause for a particular deal. The model is as follows.

\[
\text{Number of Encrustations}_i = \alpha + \beta_1 \ln(\text{Deal Amount}_i) + \beta_2 \text{Private Equity}_i + \text{Year Effects} + \varepsilon_i
\]
For independent variables we include a control for the log of the deal amount (\(\ln(\text{Deal Amount})\)). We include an indicator variable for a Private Equity deal (Private Equity), comparing private equity deals against the other three types of deals in our dataset. We include year fixed effects. We estimate the model using ordinary least squares with errors clustered by the issuer, or in the case of an acquisition, the acquirer. Model 1 of Table 4 reports the results of the model.

As discussed above, it is possible that legal events that affect one term may result in spillover impact on other terms, including encrustations in particular. Spillover can occur through direct edits or, more likely, through verbatim copying of language from other deal documents that allow unrelated encrustations to travel along with desired language. To test whether there is a spillover effect for encrustations from the cumulative events that affected the non-contractual term, we add to Model 1 an indicator variable for 2013 Onward. The base category is the pre-2013 period. We also add to Model 1 an interaction term between Private Equity and 2013 Onward to assess whether the number of words increased in the 2013 Onward period for private equity deals relative to the other deal types. Model 2 of Table 4 reports the results of the model.
Table 4: Number of Encrustations

<table>
<thead>
<tr>
<th></th>
<th>Model 1 Number of Encrustations</th>
<th>Model 2 Number of Encrustations</th>
</tr>
</thead>
<tbody>
<tr>
<td>ln(Deal Amount)</td>
<td>-0.0217</td>
<td>-0.0264</td>
</tr>
<tr>
<td></td>
<td>(-0.78)</td>
<td>(-0.96)</td>
</tr>
<tr>
<td>Private Equity</td>
<td>1.620**</td>
<td>1.376**</td>
</tr>
<tr>
<td></td>
<td>(20.56)</td>
<td>(10.53)</td>
</tr>
<tr>
<td>2013 Onward</td>
<td></td>
<td>0.122</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.95)</td>
</tr>
<tr>
<td>Private Equity x 2013 Onward</td>
<td></td>
<td>0.334*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(2.28)</td>
</tr>
<tr>
<td>Constant</td>
<td>1.325*</td>
<td>1.486**</td>
</tr>
<tr>
<td></td>
<td>(2.43)</td>
<td>(2.74)</td>
</tr>
<tr>
<td>Year Effects</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>N</td>
<td>966</td>
<td>966</td>
</tr>
<tr>
<td>adj. $R^2$</td>
<td>0.512</td>
<td>0.516</td>
</tr>
</tbody>
</table>

$t$ statistics in parentheses; * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Note from Model 1 of Table 4 that the coefficient on Private Equity is positive and significant at the 1% level. Compared with the three other deal types, private equity deals correspond to 1.62 more encrustations compared with the other deal types. Lower agency costs in private equity deals correspond with greater encrustations in the governing law clause.

Note from Model 2 of Table 4 that the coefficient for Private Equity is positive and significant at the 1% level. Private equity deals in the pre-2013 period correspond to 1.38 more other encrustations compared with other deals. This is consistent with lower agency costs for private equity deals leading to a greater overall level of encrustations. The coefficient on 2013 Onward is positive but not significant. We find no evidence that there is an increase in encrustations for the non-PE deal types in the 2013 Onward period. Lastly, the coefficient on the interaction between Private Equity x 2013 Onward is positive and significant at the 5% level. The sum of 2013 Onward + Private Equity x 2013 Onward is also positive and significant at the 1% level. Unlike for non-PE deals, PE deals corresponded with an increase in encrustations in the 2013 Onward period. This is consistent with the spillover hypothesis.
To test this possibility that the Reid case and articles and blog posts in 2017, 2018, and 2019 may have added pressure for change, we add an indicator variable for the 2017 to 2020 period (2017 Onward) to Model 2 of Table 4. We also add an interaction between Private Equity and 2017 Onward. Unreported, we obtain the same qualitative results as in Model 2 of Table 4. The coefficient on Private Equity x 2013 Onward is positive and significant at the 5% level and the sum of 2013 Onward and Private Equity x 2013 Onward is positive and significant at the 1% level. In addition, the coefficient on 2017 Onward is not significantly different from zero, consistent with no shift for the non-Private Equity deals in the 2017 Onward period. Neither the coefficient on Private Equity x 2017 Onward nor the sum of 2017 Onward and Private Equity x 2017 Onward are significantly different from zero. We do not find evidence that the number of encrustations in private equity deals increased incrementally from 2017 onward.

As another robustness test, we divide our dataset between the 2010 to 2014 period (pre 2015 period) and the 2015 to early 2020 period (2015 Onward). We expect the number of encrustations in the governing law clause to be higher in the 2015 Onward period compared with the pre 2015 period for private equity deals if attorneys made greater spillover changes to the governing law clause in response to the cumulative events related to the non-contractual clause. We re-estimate Model 2 of Table 4 substituting 2015 Onward for 2013 Onward. Unreported, we find a similar increase in the number of encrustations for PE deals in the 2015 Onward period as in Model 2. The coefficient on 2015 Onward is positive but not significant. We find no evidence that there is an increase in encrustations for the non-PE deal types in the 2015 Onward period. The coefficient on the interaction between Private Equity x 2015 Onward is positive and significant at the 5% level. The sum of 2015 Onward + Private Equity x 2015 Onward is also positive and significant at the 1% level.

V. TOP PRIVATE EQUITY FIRM TESTS

Our tests above are cross-sectional and involve a variety of transacting parties including public companies, private companies, private equity funds, and sovereigns. A strength of our data is that it allows a comparison of transactions involving contexts with relatively higher agency costs (sovereign debt offerings) versus lower agency costs (private equity deals). A
weakness of our data is the possibility that unobserved factors may affect variations in the governing law clause that then bias our tests.

As an alternative to our cross-sectional data, we identify the top fifteen private equity (PE) firms based on a ranking in 2020 by Private Equity International and collect all of the deals in which these top fifteen PE firms are participants from 2010 to 2020. We use this panel data to assess the impact of the events affecting the non-contractual term solely for these PE firms in private equity deals. We estimate the following OLS linear probability model using the presence of a Non-Contractual term as the dependent variable:

\[
\text{Non-Contractual}_i = \alpha + \beta_1 \ln(\text{Deal Amount}_i) \\
+ \beta_2 \text{2013 Onward}_i + \text{PE Firm Fixed Effects} + \epsilon_i
\]

The model includes the log of the deal amount and an indicator variable for 2015 Onward as independent variables. We use 2013 Onward as a proxy for the time period when the events affecting the non-contractual term will have a greater effect on the use of the non-contractual term relative to the period prior to 2013. 2013 Onward allows us to assess whether for the same PE firm, deals in 2013 onward are more likely to contain a non-contractual term. We estimate the model with PE firm fixed effects and cluster the errors by PE firm. Model 1 of Table 5 reports the results.

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66 See Private Equity International 2020 Ranking available at https://www.privateequityinternational.com/pei-300/
Table 5

<table>
<thead>
<tr>
<th></th>
<th>Model 1 Non-Contractual</th>
<th>Model 2 Number of Words</th>
<th>Model 3 Number of Encrustations</th>
</tr>
</thead>
<tbody>
<tr>
<td>ln(Deal Amount)</td>
<td>-0.00436 (-0.14)</td>
<td>8.990 (1.02)</td>
<td>-0.0581 (-0.74)</td>
</tr>
<tr>
<td>2013 Onward</td>
<td>0.488** (3.97)</td>
<td>141.7** (3.28)</td>
<td>0.526** (4.91)</td>
</tr>
<tr>
<td>Constant</td>
<td>0.277 (0.44)</td>
<td>75.56 (0.42)</td>
<td>3.403+ (2.06)</td>
</tr>
<tr>
<td>PE Firm Fixed Effects</td>
<td>Yes Yes Yes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>126</td>
<td>126</td>
<td>126</td>
</tr>
<tr>
<td>adj. $R^2$</td>
<td>0.172</td>
<td>0.118</td>
<td>0.036</td>
</tr>
</tbody>
</table>

$t$ statistics in parentheses; $^+ p < 0.10$, $^* p < 0.05$, $^{**} p < 0.01$.

Note from Model 1 of Table 5 that the coefficient on 2013 Onward is positive and significant at the 1% level. For the same PE firm there is a 48.8 percentage point increase in the likelihood of a non-contractual term in the governing law clause from 2013 onward compared with prior to 2013. This result corroborates our finding above that from 2013 onward, there was a significant increase in the use of the non-contractual term for PE deals compared with the other types of deals.

To examine the impact of the events affecting the non-contractual term on the number of words in the governing law clause, we estimate a regression model with the same independent variables as in Model 1 of Table 5 and using the Number of Words as the dependent variable. We report the results in Model 2 of Table 5. Note from Model 2 of Table 5 that the coefficient on 2013 Onward is positive and significant. The 2013 Onward period corresponds with governing law clauses that are 141.7 words longer compared with the pre-2013 period. The greater number of words in the 2013 Onward period indicates that PE firms and their attorney agents engaged in greater contract drafting activity in the 2013 Onward period. This is consistent with the series of non-contractual events increasing the amount of attention paid to the governing law clause.

Greater contract drafting activity may indicate that private equity firms are engaged in “beneficial” changes to the contract by adding value-enhancing non-contractual terms to the governing law clause. However, more contract drafting activity may also lead to spillover changes that can have the off-setting effect of increasing encrustations. Encrustations have no
economic value but by increasing the complexity and reducing the clarity of the contract's language, they increase the risk of strategic litigation. During the time period of our study there are no legal shocks affecting the incentives to revise the encrustations. Focusing on the encrustations provides a more direct test of the impact of contract drafting spillovers on the incidence of encrustations. To assess whether there was a spillover effect from 2013 onward, we re-estimate Model 2 of Table 5 replacing the number of words with the number of encrustations as the dependent variable. We report the results in Model 3 of Table 5.

Note from Model 3 of Table 5 that the coefficient on 2013 Onward is positive and significant at the 1% level. In our private equity firm fixed effects model, the number of other encrustations increased in the 2013 Onward period, consistent with a spillover effect from increased contract activity leading to more encrustations.

To test this possibility that the Reid case and articles and blog posts in 2017, 2018, and 2019 may have added pressure for change, we add an indicator variable for the 2017 to 2020 period (2017 Onward) to the models of Table 5. Unreported, the coefficients on 2013 Onward remained positive and statistically significant at the 1%, 5%, and 1% levels respectively. None of the coefficients on 2017 Onward in contrast were significantly different from zero. While we find evidence consistent with 2013 forming a focal point for change in the governing law clause, we do not find evidence that the later events concerning the governing law clause in 2017, 2018, and 2019 had an incremental effect above the 2009 and 2013 events.

As another robustness test, we divide our dataset between the 2010 to 2014 period (pre 2015 period) and the 2015 to early 2020 period (2015 Onward). We re-estimate the models of Table 5 substituting 2015 Onward for 2013 Onward. Unreported, we find a similar effect as in Table 5 from the cumulative impact of the events affecting the market’s perception of the non-contractual term when we divide our dataset time period roughly in half using 2015 Onward. The coefficients on 2015 Onward are positive and significant at the 1% levels in the re-estimated models.

VI. CONCLUSION
Our prior work in sovereign debt contracting showed that a key source of agency costs was the reluctance of agents—the bankers, debt managers, and most especially the lawyers—to act unilaterally to revise boilerplate terms that were accepted as the standard form in a large multilateral market. The current study has been designed to further advance our understanding of the ways that agency costs influence the choices that lawyers face between innovation and encrustation when changes in legal rules dictate revisions to standard contract language.

Two results stand out. The first is predictable: lawyers who draft private equity M&A deals pay more attention to the deal terms than lawyers producing corporate and sovereign bond contracts because the principals in the M&A/private equity market have more at stake and are directly involved in the deals. Because agency costs are low in the private equity setting, we observe more innovation in private equity deals as compared to sovereign and corporate bond transactions where the agency problems of drafting lawyers are much greater.

The second result is surprising: contracts drafted by private equity lawyers have more obsolete and encrusted terms than the contracts of the other deal types. This anomalous result requires a rethinking of the different motivations of the two groups of lawyers. The bond lawyers’ behavior is relatively easier to characterize. The study supports the hypothesis that bond lawyers largely avoid any responsibility for superintending the terms in the contracts they produce. There is virtually no “drafting” in any meaningful sense of that word. Rather, as two of us have noted elsewhere, these are contracts produced on an assembly line, sometimes in as little as three and a half minutes.67 The consequence of paying no attention to the terms of the contract is that there are no innovations but there are also fewer of the encrustations that result from efforts to modify existing language. This is not to say that the lawyers would not wish to modify their contract provisions, if left to their own devices. But, as prior research has shown, the pressure to retain language that conforms to the “market standard” and conforms to whatever worked in the prior deal is significant.68

67 See Gulati & Scott, supra note 14.
68 Choi et al., supra note 1; Gelpern et al., supra note 3.
Private equity lawyers present a more complex picture. Our results suggest that they are more motivated to respond to the need for legal change than their compatriots in the bond world. But at the same time, the effort to revise existing language to improve contractual value appears to have spillover effects: costly encrustations are imported as beneficial language is added. Our conjecture is that what we observe in the data is the product of the dominant drafting strategy in law firms, which is to look for models to copy rather than to draft language from scratch. That is, lawyers try to find examples of the desired term elsewhere and import that language verbatim into the contract together with other redundant and obsolete terms including, in the extreme case, terms that are harmful to the client's interests if retained in the contract. Whether our conjecture reflects the real world of contracting or whether the net result of this drafting strategy is an increase in contractual value for their clients is a question that we hope to tackle in further work.

69 One explanation for the increase in encrustations might be that lawyers, while seeking to innovate, simultaneously feel the need to be able to argue that they are using “market standard” language. Glenn West, in his comments on our paper, suggested something along these lines. He also made an interesting point about drafting norms, noting:

[It is considered rude and a breach of negotiation etiquette to rewrite a party’s first draft even if it contains encrustations—the idea is to fix encrustations that do harm, but to leave those that do no harm. And sometimes the way to do that is by additions without deletions.]

Emails from Glenn West (July 15, 2020) (on file with authors).