

THE PARADOX OF CONTRACTING IN MARKETS

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I

INTRODUCTION

Traditional economic analysis distinguishes economic organization along three dimensions: firm, contract, and market. This categorization is misleading in any number of respects, but none more so than the assumption that contract and market are separate modes of exchange. In fact, other than barter, which is almost unknown in contemporary commercial transactions, every market transaction is implemented by contract. Thus, in markets the two modes of exchange are inextricably combined.¹ Moreover, the vast majority of contract activity occurs in some form of market, so it does not require much loss of generalization to say that not only are contracts in all markets, but markets are also in all contracts. This implies that as markets change in character so too will the contracts that are embedded in them. Economists have failed to appreciate the implications of this integration of contract and market because of their naïve and parsimonious conception of contract. But lawyers, too, have failed to appreciate the tension between the fact that markets change the shape of contract and the state's commitment to a unitary regime of contract law. This failure to understand the relationship between contract law and the central institutions of economic organization has significant consequences. Among them is the failure to recognize what I call the fundamental paradox of contracting in markets, the topic that I take up in this Article.

To explain the paradox, I begin by distinguishing two quite different economic objectives. The first objective is the goal of efficient market exchange through contract—the process of designing contracts that motivate parties to maximize the joint gains from transactions.² The second quite distinct objective

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1. Ronald Coase defines markets as “institutions that exist to facilitate exchange, that is, they exist to reduce the costs of carrying out exchange transactions.” RONALD H. COASE, *THE FIRM, THE MARKET, AND THE LAW* 7 (1988). But of course, the same definition applies to contract as well.

2. See Alan Schwartz & Robert E. Scott, *Contract Theory and the Limits of Contract Law*, 113 *YALE L.J.* 541, 544–45 (2003) (describing the goal of contract as “facilitat[ing] the efforts of contracting

is the efficient production of contracts—the process of creating widely useful terms and conditions that implement enforceable legal obligations. Much of law and economics scholarship has been devoted to the first efficiency objective but, until recently, the second has been virtually unexplored.³ Thus, we know a great deal about how to design contracts to motivate parties to invest optimally in their relationship, but very little about the shape-shifting process by which widely-used contract terms that motivate investment are produced. Yet, that production process is the source of the paradox of contracting in markets: as markets thicken (more and more parties participate in the same or similar transactions), the factors that generate efficiencies in the production of contracts—standardization and economies of scale—are the same factors that produce inefficiencies in the very contract terms that parties rely on to motivate performance. And, as with any paradox, the reverse is true: the factors that produce more efficient contract design—bespoke efforts to motivate investment and trade—are the same factors that generate the loss of scale and the resulting inefficiencies in the production of contracts.

Recognizing this paradox is the first step toward answering a central question that remains unresolved: how can (and do) contracting parties in thick, multilateral markets optimize between efficient production of contracts and efficient contract design?⁴ The challenge is to exploit production efficiencies without at the same time degrading the contract terms that motivate performance. My claim is that the key to optimizing the activity of contracting in thick markets requires overcoming a fundamental collective action problem endemic to the production process: the private interests of the parties in these markets diverge from their collective interests. Understanding how effective coordination can create a functioning network to address the obsolescence that is a byproduct of standardization has important normative implications. In particular, it suggests that current approaches to consumer transactions that focus

parties to maximize the joint gains . . . from transactions” by solving the “canonical ‘contracting problem’ of ensuring both efficient ex post trade and efficient ex ante investment”).

3. Scholars of contract law have largely ignored the study of how contracts are produced—even though assumptions about contract production and revision underlie many doctrines of contract interpretation. For an example of an attempt to understand the production problem, see Stephen J. Choi, Mitu Gulati & Robert E. Scott, *The Black Hole Problem in Commercial Boilerplate*, 67 DUKE L.J. 1 (2017) (exploring how certain contracts are created and evolve over time). See also Robert Anderson & Jeffrey Manns, *The Inefficient Evolution of Merger Agreements*, 85 GEO. WASH. L. REV. 57 (2017); Barak Richman, *Contracts Meet Henry Ford*, 40 HOFSTRA L. REV. 77 (2011); D. Gordon Smith & Brayden G. Smith, *Contracts as Organizations*, 51 ARIZ. L. REV. 1 (2009); Kevin E. Davis, *Interpreting Boilerplate* (N.Y.U. Ctr. for Law, Econ. & Org., Working Paper No. 10-21, 2010), http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1618925 [<https://perma.cc/SXJ7-78MG>]; Julian Nyarko, *Stickiness and Incomplete Contracts* (Working Paper, 2019), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3446206 [<https://perma.cc/XXZ9-F5YH>].

4. For my purposes, a market is thick when many parties participate in similar transactions and will benefit from coordinated responses to the contracting environment. As I discuss in Part III, when markets are thick in the sense that many actors face similar challenges in their dealings, the affected parties often will institutionalize their innovative contract forms and terms through collective action. See *infra* text accompanying notes 54–57.

on the regulation of exploitative terms in *bilateral* contractual relations misconceive the problem. Consumer contracts are made in large, *multilateral* markets. Understanding the inherent inefficiencies of contracts in those markets is the key to reframing the regulation of consumer transactions. State assistance in overcoming collective action impediments in these markets is likely to be far more efficacious than either unconscionability constraints on adhesion contracts⁵ or traditional command and control regulation of patently abusive terms.⁶

The Article proceeds as follows. Part II sets out the paradox of contracting in markets in some detail. I first explain how parties in thin or *bilateral* contracting markets optimize contracting costs by shifting resources between the transaction costs of negotiating and drafting *ex ante* agreements and the expected litigation costs of enforcing those contracts. This bespoke balancing of *ex ante* and *ex post* contracting costs produces the most efficient transaction for the contracting cost.⁷ But as markets thicken, traders can exploit economies of scale in *multilateral* contracting markets by standardizing the production of the contracts that govern the exchange transaction.⁸ However, this standardization leads to inefficiencies endemic to boilerplate: boilerplate terms are sticky, resistant to adaptation to changed conditions, and subject to “black holes” that remain in the contract even in the face of adverse legal consequences.⁹ I examine the ways in which obsolete design has led to costly litigation in thick markets, particularly the markets for sovereign and corporate bonds, where agency costs have impaired efforts to revise obsolete contracts terms.

In Part III, I trace the different ways that some parties who trade in multilateral markets have overcome the collective action problems that impede more efficient contract design by creating a governance structure—or “spider”—to organize their loose web of relationships. This focus on coordination and cooperation conceives of the contracting parties in multilateral markets as potential members of a commercial network with the capacity to share

5. The classic approach to the regulation of consumer contracts is through the application of the unconscionability doctrine. Enshrined in U.C.C. § 2-302, and much admired by scholars who advocate for consumer protection, unconscionability is framed as a single court reviewing *ex post* a single *bilateral* contract between a consumer and a sophisticated seller and finding that a term (or terms) is the product of “unfair surprise” and is “unreasonably unfavorable” to the consumer’s interests. For discussion, see ROBERT E. SCOTT & JODY S. KRAUS, *CONTRACT LAW AND THEORY* 55–65 (2013).

6. *See infra* Part IV.C.

7. I have referred to this balancing as the contracting parties’ attempt to maximize “the incentive bang for the contracting-cost buck.” Robert E. Scott & George G. Triantis, *Anticipating Litigation in Contract Design*, 115 *YALE L.J.* 814, 823 (2006).

8. The distinction between bilateral contracting in thin markets and multilateral contracting in thick markets is drawn more sharply in this Article than what we see in commercial contracting generally. This stylization is designed to illustrate the differences in contracting practices that are my focus. Of course, the reality is much less clear and the lines between the two markets are blurred. Perhaps the best way to conceive of this distinction is to imagine that thin market bilateral contracting and thick market multilateral contracting are poles of a continuum where many markets along the continuum exhibit features of both.

9. I discuss these endemic inefficiencies further in Part II. *See infra* text accompanying notes 30–35.

information in important ways.¹⁰ I explore the different forms of network organization from trade associations that function in low uncertainty environments to supply chain networks that share information in more uncertain settings.¹¹ In some cases, however, high uncertainty renders parties incapable of coordinating their network activities. The leafy green industry illustrates how in this environment the state can facilitate coordination by helping to create a spider for the network.

In Part IV, I turn to the normative question of how best to deal with the problems of bad contract design in consumer markets. Consumer transactions have long been a fraught subject for scholarly analysis. Many scholars continue to view the regulation of consumer contracts through the lens of the bilateral contracting market.¹² Even when the focus properly shifts to multilateral markets, few solutions to perceived inefficiencies have gained traction. Early efforts to motivate disclosure have foundered on the multiplicity of terms in consumer contracts, a form of information overload that prevents market forces from eliminating inefficient terms. I argue that conceiving of consumers and their sellers as a network without any spider offers a fresh perspective on why conventional solutions to reducing the costs of inefficient (and exploitative) contract terms have been unsuccessful. I conclude that a regulatory solution that aids in organizing the network of buyers and sellers may better address the problem of obsolete and encrusted contract terms in multilateral consumer markets.¹³

II

THE PARADOX: EFFICIENT CONTRACT DESIGN OR EFFICIENT PRODUCTION OF CONTRACTS

A. Bilateral Contracting: Bespoke Contract Design in Thin Markets

We observe successful efforts to design contracts efficiently in bespoke transactions that are characteristic of thin markets where the actors are few and

10. Commercial networks are mechanisms for coordination and cooperation between formally independent but functionally interdependent entities.

11. As I discuss in Part III, some networks deploy contractual mechanisms—whether in the form of a master contract as in the case of a franchise or a manufacturing supply chain, or a bureaucratic structure in the case of trade associations—that support network collaborations. These relationships have a “spider in the web”—a controlling entity or hierarchy at the center of the network that facilitates network formation and coordination. For discussion, see Ariel Porat & Robert E. Scott, *Can Restitution Save Fragile Spiderless Networks?*, 8 HARV. BUS. L. REV. 1 (2018).

12. For examples of proposed common law contract developments that, despite their reform attempts, still operate in the bilateral lens, see sources cited *infra* note 82.

13. Contract terms are obsolete in the sense I use here when they no longer (or never did) provide appropriate incentives to parties to maximize joint value. Terms are encrusted when they are overlaid with jargon in ways that undermines intelligibility. For discussion, see *infra* text accompanying notes 32–39.

scattered.¹⁴ In these circumstances, contracting occurs in bilateral relationships. Here, the design goal is to weigh contracting costs against the incentive gains they produce in achieving more efficient investment and trade. Thus, when markets are thin and the level of uncertainty low, we see bespoke state contingent contracting: explicit formal contracts between two parties that take the if-then format made possible by low uncertainty. The thinness of the market removes any scale economies from production efficiencies and justifies individualized design strategies where parties shift contracting costs between front end transaction costs and back end enforcement costs. It is the particular balancing of front end and back end contracting costs that optimizes contractual incentives.¹⁵ In this bilateral contracting environment, low uncertainty allows contract designers to anticipate and address (most of) the future states of the world and specify what should happen in each possible state.

Contract design in bilateral relationships also adjusts to higher levels of uncertainty.¹⁶ As uncertainty increases, efforts to craft fully state contingent contracts come under pressure. Parties in bilateral markets then turn to more flexible relational contracts that pair discretion in how explicit obligations are fulfilled as events evolve through the use of standards that govern key terms such as price, quantity, and effort.¹⁷ In long-term procurement agreements, for example, the cost of formalizing anticipated contingencies and specifying their consequences is high. Here, the reality of an uncertain future motivates the parties to reach agreement on contextualized standards that permit quantity and price to be adjusted as circumstances change over time.¹⁸ Distribution contracts are another example of the efficiency advantages of coupling an explicit statement of obligation with a standard that gives discretion over how the obligation is fulfilled. These contracts often require distributors to use their “best

14. Bespoke transactions are tailor-made contracts designed to fit the requirements of a single transaction or transaction type.

15. Scott & Triantis, *supra* note 7, at 817.

16. This transformation in the nature of contract as uncertainty increases highlights the distinction between risk and uncertainty that Frank Knight identified almost a century ago. *See generally* FRANK H. KNIGHT, RISK, UNCERTAINTY AND PROFIT (1921). In Knight’s usage, there is risk when alternative future states of the world occur with quantifiable probability: The future can be expressed as a probability distribution. But under uncertainty, too little is known about these eventualities to anticipate precise risks and their probability. The Knightian distinction between risk and uncertainty is a useful way to illustrate the way accelerating technology and global competition have created unique circumstances that resist probabilistic classification.

17. Allowing flexibility (or discretion) in relational contracts saves parties the transaction costs from continually having to update or renegotiate price or quantity in light of changed external circumstances. A further advantage of a flexible relational contract is that it permits the parties to “smooth the bumps” in the inevitable variations in supply and demand that otherwise may threaten short term business disruption. *See* Schwartz & Scott, *supra* note 2, at 562–65.

18. The standards in procurement agreements are not free floating; they are contextualized to the particular transaction. For example, a buyer cannot demand (nor can a seller produce) a quantity that is “unreasonably disproportionate” to the quantities *the parties themselves* traded in prior periods. U.C.C. § 2-306(1) (AM. LAW INST. & UNIF. LAW COMM’N 2017). Courts adjudicate disproportion by anchoring on the parties’ experience under the contract. *See, e.g.*, Alan Schwartz & Robert E. Scott, *The Common Law of Contract and the Default Rule Project*, 102 VA. L. REV. 1523 (2016).

efforts” (or similar standards) in performing the contract.¹⁹ Such standards often are preceded by instructions that contextualize the broad standard.²⁰ For example, parties may describe the relevant industry or product context and, when possible, the evidence the court should use to measure performance under the standard.²¹ Alternatively, the contract may provide a list of specific actions the agent is required to undertake as exemplars of behavior that meet the best efforts standard.²² In either case, a reviewing court can infuse content into a best efforts (or similar) standard by inferring the parties’ general goals from the contract’s descriptive clauses and detailed rules.²³

Unfortunately, even formal legal standards that provide instructions to a court cannot easily regulate either the renegotiation or the adjustment processes because the parties’ expectations of the litigation outcome, and not a court’s judgement, shape these processes. Here, parties to relational contracts can (and do) rely on the trust created by repeated opportunities to mutually adjust as the future unfolds.²⁴ Thus, optimal contract design in this context motivates performance both through the threat of formal legal enforcement and through informal or self-enforcing mechanisms, including reputational sanctions, the loss of future dealings, and social norms of trust and reciprocity.

Technological change has raised the level of uncertainty in bilateral contracting ever higher and, consequently, more complex collaborative

19. See *CORI Contracts Library*, UNIV. OF MO.-COLUMBIA CONTRACTING & ORGS. RESEARCH INST., <https://cori.missouri.edu/> [<https://perma.cc/YQ5N-QWVH>] (showing that 4,328 out of the 24,965 contracts in the CORI database have “best efforts” terms, or 17.34% of the total).

20. See Scott & Triantis, *supra* note 7, at 851–56 (discussing how parties contextualize standards to fit their circumstances).

21. For an example, see the “purpose” clause from the Fountain Manufacturing Agreement between Apple Computer, Inc. and SCI Systems, Inc., <http://contracts.onecle.com/apple/scis.mfg.1996.05.31.shtml> [<https://perma.cc/XZ9J-DQ6A>]. See also Ronald J. Gilson, Charles F. Sabel & Robert E. Scott, *Text and Context: Contract Interpretation as Contract Design*, 100 CORNELL L. REV. 23, 58–60 (2014) (describing how sophisticated parties design contracts to guide judicial interpretation).

22. See, e.g., Distribution Agreement between Microblend LLC and Mobil Oil Corp. (June 6, 1998) (on file with author) (listing specific actions constituting best efforts, including “providing demonstrations of the Products to potential customers; assisting in discharging seller’s obligation under its warranties relating to the Product; submitting, at least thirty days prior to the start of each calendar quarter, a quarterly forecast for the upcoming six months; assisting in determining the credit worthiness of any distributor; and otherwise assisting in the sale and marketing of the Product as the parties may from time to time agree”).

23. See Scott & Triantis, *supra* note 7, at 851–56 (reporting the results of a sample of contracts that combine standards with rules so as to contextualize the standard). Where the parties combine standards and rules that relate to the same subject matter, the *ejusdem generis* canon applies. The meaning of the general language is then limited to matters similar in kind or classification to the enumerated precise terms. See, e.g., *Tate v. Ogg*, 195 S.E. 496, 499 (Va. 1938) (holding that an enumeration which included “any horse, mule, cattle, hog, sheep, or goat” excluded turkeys).

24. In many contexts, reputation, repeat dealings, and norms of reciprocity provide the best available means of regulating the inevitable renegotiation and adjustment process so as to reduce the risk of exploitation of the parties’ vulnerabilities. See Robert E. Scott, *Conflict and Cooperation in Long Term Contracts*, 75 CAL. L. REV. 2005 (1987) (exploring how social and contractual norms facilitate mutual cooperation and mitigate information and enforcement deficiencies between parties).

agreements have emerged.²⁵ These new agreements move beyond the rudimentary linking of explicit and implicit obligations seen in the long-term procurement and distributorship agreements discussed previously. In these collaborative (or framework) agreements, the formal elements of the contract are designed to facilitate the growth of trust that, in turn, regulates the substantive elements of the parties' relationship. A formal governance structure induces the cooperative behaviors that are formally braided with explicit obligations.²⁶ In these contracts, the trust that results from mutual opportunities for adjustment not only signals the counterparties' willingness to cooperate, but also their capability to adapt to an uncertain future.

In all of these bespoke settings, where design choices are influenced primarily by the level of uncertainty, the costs of contracting are assessed only by reference to the incentive gains produced *in that particular transaction*. An appropriate analogy is the relationship between the costs of crafting a beautiful piece of furniture by hand and the value to be derived from its sale to an appreciative buyer. But those considerations are inapt once the market for furniture of this style increases and the cabinetmaker can now contemplate making many sales of similarly designed pieces to many buyers. When markets thicken and scale economies can be realized—both in the underlying economic good and the contract that regulates the trade—the cost of producing any given contract becomes economically relevant. It is in these *multilateral* contracting environments that efficient contract design gives way to efficient production of contracts.

B. The Efficient Production of Contracts in Thick Markets

Producing contracts more efficiently in multilateral markets reduces production costs and creates value that is shared between the market participants. Contract production efficiencies result primarily from the standardization of contract terms that are enabled by economies of scale. In thick markets where there is scale in the production of an economic good, standardized contract terms facilitate the scaling of the associated contracts as well.

Standardization reduces the transaction costs of formulating the terms that embody the legal rights and obligations of the contracting parties. Providing contract drafters a menu of incentive compatible terms from which they can choose greatly simplifies and reduces the costs of contracting. Moreover, the improvement in production efficiency caused by standardization goes far beyond the additional resource costs saved by not individually drafting the terms for each contract. Standardized terms bring to bear a collective wisdom and experience of

25. For discussion of these collaborative contracts and contracting for innovation more generally, see Ronald J. Gilson, Charles F. Sabel & Robert E. Scott, *Contracting for Innovation: Vertical Disintegration and Interfirm Collaboration*, 109 COLUM. L. REV. 431 (2009).

26. For a discussion of the interplay between the formal governance structure and the informal bonds of trust that it generates through iterative exchanges of information between the parties, see Ronald J. Gilson, Charles F. Sabel & Robert E. Scott, *Braiding: The Interaction of Formal and Informal Contracting in Theory, Practice, and Doctrine*, 110 COLUM. L. REV. 1377 (2010).

ways to avoid mistakes in formulating terms that parties could not generate individually. The unique benefits of standardization derive from the process by which standard formulations of terms evolve and gain a distinct, recognized, and consistent meaning within the market. This evolutionary process tests combinations of terms for dangerous but latent defects. Over time, the consequences of standard formulations are observable over a wide range of transactions, permitting the removal of ambiguities and inconsistencies. In this way, mature standardized terms become validated by experience and are therefore safer than new and innovative formulations of terms.²⁷

Standardized terms that become boilerplate in multilateral markets also reduce learning costs by providing a uniform system of communication. Contract terms that have been used over a long period of time become familiar. Thanks to repeated use, terms that have flaws are better understood and uncertainties are eliminated. Terms that survive this quasi-Darwinian trial and error process become mature terms whose risks and performance characteristics are well known and understood by market participants. In this way, both market participants and courts develop an understanding and confidence in the reliability of these terms. This high level of understanding then reduces the risk of erroneous interpretation by a court. In this sense, these terms are “battle tested.” Using standard language in any given contract thus has social benefits that are external to that contract: repetition reduces the cost that others must expend in learning the meaning of the clause.²⁸

Network externalities may also operate in the case of standard contract terms. Contract terms that are used more often and more widely will be priced by a larger number of market actors. As a consequence, the price for universally used terms will be more accurate. By contrast, there will be greater uncertainty about the value of contract terms that are idiosyncratic to a few users. Liquidity is a crucial characteristic of financial instruments such as bonds that trade in multilateral markets, but liquidity will suffer when individual bonds within a set have different contract terms whose particular risks need to be separately evaluated and estimated. Since ease and speed of pricing are important in fast-moving markets, traders will avoid buying products that require costly consultation in order to determine their value.²⁹

27. See TINA L. STARK, *NEGOTIATING AND DRAFTING CONTRACT BOILERPLATE* § 1.02 (2003) (observing that provisions that have been used repeatedly develop a “hallowed status”—they have now been blessed). For discussions of how boilerplate terms become resistant to change, see Charles J. Goetz & Robert E. Scott, *The Limits of Expanded Choice: An Analysis of the Interactions Between Express and Implied Contract Terms*, 73 CAL. L. REV. 261 (1985); Marcel Kahan & Michael Klausner, *Standardization and Innovation in Corporate Contracting*, 83 VA. L. REV. 713 (1997).

28. Kahan & Klausner, *supra* note 27, at 763–64.

29. Michael Klausner, *Corporations, Corporate Law, and Networks of Contracts*, 81 VA. L. REV. 757, 785–89 (1995).

C. The Dilemma: Efficient Production Produces Sub-Optimal Contract Terms

Standardization in the production of boilerplate is, however, a double-edged sword: the efficiencies that reduce the costs of producing contracts are the very source of the contracts' inefficiencies. Standard-form or boilerplate contract terms are very different from the optimal terms in a bespoke commercial contract. The certainty that standardization imparts to the market limits the ability of contract drafters in multilateral markets to draft vague standards designed to give discretion to courts to determine contractual rights *ex post*. Drafters thus are functionally incapable of shifting contracting costs from the front end of the contracting process to the back end as they do when designing bespoke contracts in bilateral markets.³⁰ This limitation puts even more pressure on drafters to produce standardized terms *ex ante* that will motivate parties to invest and trade efficiently.

But standardized terms inevitably fit individual deals less perfectly than situation-specific tailored agreements. The risk of contractual ambiguity or indeterminacy is greater than with a tailored contract because the fit with any individual transaction is necessarily imperfect. This linguistic uncertainty challenges courts whenever they are asked to interpret a standard provision in a commercial contract and determine what the parties understood that provision to mean when they contracted.³¹ Indeed, some standardized terms in boilerplate contracts may have lost any recoverable meaning—thus creating what my co-authors and I have called a contractual black hole.³² Here, courts may be practically incapable of inferring the parties' intended meaning of the standardized term when they drafted the contract.

Unfortunately, the very elements of fixed and unchanging meaning that make standardized terms attractive are the same elements that can contribute to the erosion of that meaning over time. In addition to the ordinary risks of obsolescence, the repetitious use of boilerplate has two pernicious effects that render the life span of an efficient boilerplate term needlessly short. The first effect is “rote usage.” Over time, some standardized terms get used by rote so consistently that they lose their original meaning. In effect, they are victims of contractual overkill. Nonetheless, the terms may continue to be employed because parties see no reason to incur a risk, however small, of jeopardizing the

30. An illustration of the difficulty of drafting standards in multilateral markets for courts to interpret *ex post* is the largely futile efforts of parties seeking to have courts enforce the ubiquitous material adverse change clause (MAC) in merger and acquisition contracts. The MAC is designed as a standard term that will permit in multilateral markets the acquirer to abandon the merger in light of specified events that occur after signing but before the deal closes. To date, only one court has found a material adverse change sufficient to trigger a MAC and justify the acquirer backing out of a merger deal. *See Akorn, Inc. v. Fresenius Kabi AG*, 198 A.3d 724 (Del. 2018). The effect of courts' reluctance to find a MAC is that the clause functionally becomes a standardized “no MAC” term in the contract.

31. 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 its contract partner could plausibly believe it meant when the parties contracted.” Schwartz & Scott, *supra* note 2, at 568–69.

32. For discussion, see Choi, Gulati & Scott, *supra* note 3, at 38.

understood meaning of their agreement.³³ “Encrustation” is a second cost of excessive repetition: the intelligibility of language deteriorates significantly as legal jargon is overlaid on standard linguistic formulations.³⁴ Rote usage and encrustation are related phenomena, although they may be found independently in boilerplate terms. When combined in a particular clause or phrase, a term becomes linguistically uncertain: no particular meaning can be uncovered that is more probable than any other meaning. Terms that are linguistically uncertain in this sense are not ambiguous, but rather are hopelessly vague. The term in question can apply to an infinitely wide spectrum of referents.³⁵

What is the mechanism that produces encrustation in standard boilerplate? Anecdotal evidence from interviews with lawyers who draft standardized contracts suggests the following process.³⁶ Drafting lawyers use market standard-forms as far as possible. But the contract must also be tailored to the client’s needs. The drafters must change names, dates, locations for payment, terms of trade, and other transactional details from the deal document being used as a template. Yet lawyers working with standard-form language that has been repeated by rote for many years often lack understanding of the contemporary purpose(s) served by boilerplate terms. Lawyers drafting marginal modifications to fit the goals of a transaction while ignorant of the contemporary function of the contract’s boilerplate terms will often add legal jargon in an effort to clarify the boilerplate. These insertions can occur with greater frequency when the drafting lawyers have little experience with the particular boilerplate terms. Encrustation can thus result from repeated efforts to clarify standard language whose contemporary meaning is unclear to the drafter.³⁷ The encrustation process ultimately weakens the communicative properties of boilerplate terms, reducing their reliability as signals of the parties’ true intentions.³⁸ Nevertheless, widespread use of the encrusted clauses continues, even after they cease to have much or any substantive content, because rote repetition identifies them as the standard terms that are present in all such contracts.³⁹

Whenever boilerplate terms lose some or all of their original meaning, either through obsolescence or encrustation, there is a heightened risk that courts may

33. Goetz & Scott, *supra* note 27, at 288–89.

34. *Id.*

35. Linguistic uncertainty is distinct from the more familiar interpretive challenges courts face when interpreting terms that are ambiguous. A term is ambiguous when it is “capable of more than one sensible and reasonable interpretation.” *Ross Bros. Constr. Co. v. Oregon ex rel. Transp. Comm’n Highway Div.* 650 P.2d 1080, 1082 (Or. Ct. App. 1982).

36. This description is drawn from Choi, Gulati & Scott, *supra* note 3, at 10.

37. To be sure, alterations may occur in other contexts as well. But there are greater error-correction mechanisms for those boilerplate terms that do have understood meaning and frequent usage. Drafters will be less likely to adopt changes in terms with understood meanings and usage if the additions changed this meaning and usage. Where a term has lost meaning and become a black hole, these error-correcting mechanisms will not apply.

38. Philip Wood has described the process of encrustation as akin to that of barnacles accumulating on a ship’s hull. PHILIP WOOD, *LIFE AFTER LEHMAN: CHANGES IN MARKET PRACTICE* 9 (2009).

39. Choi, Gulati & Scott, *supra* note 3, at 10.

be persuaded to adopt an unanticipated interpretation of the term(s) at issue that misconceives the ex ante bargain between the parties to the contract. A standard assumption is that the inefficiencies caused by this judicial error will be limited to an isolated case of an aberrant interpretation because sophisticated commercial parties can, and are motivated to, readily correct a court's interpretive mistakes. Indeed, given the important role that standardization plays in replicating boilerplate terms in tens of thousands of commercial contracts in multilateral markets, and the non-trivial possibility that a court may err in interpreting terms that are obsolete or encrusted, commercial parties have strong incentives to ensure that their standardized contract terms are continually revised. Updating standard terms in multilateral markets is essential to ensuring that a common meaning is preserved, one that efficiently motivates the parties to invest and trade.

Despite the plausibility of the foregoing assumption, there is mounting evidence that parties in some multilateral markets fail to react to (apparent) judicial errors in interpreting boilerplate terms and are unable readily to convert boilerplate into new and intelligible formulations.⁴⁰ Daunting collective action problems appear to impair the efforts of parties in these markets to clarify the meaning of encrusted boilerplate terms. Inertia results from several costs that collectively deter any individual participant in a multilateral market from revising standard terms. For example, any revision in a standard deal threatens to put the unchanged terms in earlier deals at greater risk, and revisions increase the risk of an unanticipated judicial interpretation of the new term as well. There is also uncertainty about the reaction to a revised contract term by potential traders in the market: participants in multilateral markets express strong preferences for a standard package of terms.⁴¹ Revising a term undermines standardization and necessarily increases the learning costs for potential traders. Since the production of network externalities is a primary virtue of standard-form contracts, it follows that standardized contract terms may be slow to change, even after market participants identify costly ambiguities.⁴² Meanwhile, the inefficiencies caused by linguistically uncertain boilerplate may not be fully priced by the market. The result is that arbitrage opportunities remain for market traders who can identify

40. Stephen J. Choi, Mitu Gulati & Robert E. Scott, *Variation in Boilerplate: Rational Design or Random Mutation?*, 20 AM. L. & ECON. REV. 1 (2017).

41. Elizabeth de Fontenay, Josefin Meyer & Mitu Gulati, *The Sovereign Debt Listing Puzzle*, (Duke Law Sch. Pub. Law & Legal Theory Series, Working Paper No. 2017-4, 2018), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2853917 [<https://perma.cc/7ZLA-JZE4>]; Anna Gelpern & Mitu Gulati, *How Much is This Clause: Debt Managers on Pricing Bond Contract Terms*, (Duke Law Sch. Working Paper, 2016), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2830445 [<https://perma.cc/4N7C-C75C>]. This suggests that contract terms are far more endogenous than is typically assumed in models of contract where individual purchasers and sellers are assumed to come to the market with their individual preferences that are independent of other traders.

42. For discussion, see Kahan & Klausner, *supra* note 27. The problem of persistent linguistic uncertainties can in theory be eliminated by a coordinating agency such as an industry association. See *infra* Part III.B.

uncertain meanings and then exploit those uncertainties in litigation, thereby capturing a greater share of the underlying contractual rights.

The phenomenon of uncertainties in standard-form contracts attracting the attention of professional contract arbitrageurs has played out vividly over recent years in the context of sovereign debt litigation.⁴³ The most recent and salient example 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.⁴⁴ The settlement gave the holdouts staggering recoveries on the bonds that they had purchased in the secondary market.⁴⁵ The *pari passu* litigation suggests that the process of modifying boilerplate terms to correct for ambiguities or uncertainties can take years. It also shows that the process can prove enormously costly, particularly in this case given the hundreds of billions of dollars of bonds with suboptimal contract terms that were issued in the interim period that extended more than three years.⁴⁶

There is an obvious solution to the impediments preventing individual traders in multilateral markets from revising the obsolete terms that are the inevitable byproduct of production efficiencies in contracting. Consider the sovereign bond market as an example: if the market participants acted together, they could overcome many of these inertia costs. The market could coordinate to create a network of traders who would collectively advance a new market standard with a clear interpretation of its meaning and purpose. This collective action would create a new standard acceptable to market traders, one that reduced legal uncertainty about the interpretation of the new standard and minimized the risk

43. Contractual arbitrage has become a lucrative business in sovereign debt markets. For a further discussion of the rise of this form of arbitrage, see Stephen J. Choi, Mitu Gulati & Robert E. Scott, *Contractual Arbitrage*, in OXFORD HANDBOOK OF INTERNATIONAL GOVERNANCE (Eric Brousseau et al. eds., 2020) (forthcoming).

44. 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 External Indebtedness," was an inter-creditor agreement that entitled a creditor who was not paid its pro rata share to an injunction against other creditors who were paid that share. Choi, Gulati & Scott, *supra* note 3, at 27. Bonds worth many billions of dollars were sold with the litigated language unchanged for years after the first challenge by the holdouts was mounted. *Id.* at 23.

45. Katia Porzecanski, *Singer Makes 369% of Principal on Argentine Bonds in Debt Offer*, BLOOMBERG, (Mar. 1, 2016), <https://www.bloomberg.com/news/articles/2016-03-01/singer-makes-369-of-principal-on-argentine-bonds-in-debt-offer> [<https://perma.cc/S7M7-8J5M>]; see also Martin Guzman, *An Analysis of Argentina's 2001 Default Resolution* (Ctr. for Int'l Governance Innovation, Working Paper No. 1010, 2016).

46. Relatively few changes were made to the *pari passu* boilerplate for over three years after federal courts in New York endorsed the ratable payments interpretation in the litigation involving Argentina (and roughly fifteen years after a similar decision in Brussels involving Peru). This is so even though the drafting lawyers, and the entire sovereign bond industry, were nearly unanimous in condemning the series of judicial decisions that permitted the contractual arbitrage strategies of the holdout creditors to prevail. The key decisions were *NML Capital, Ltd. v. Republic of Argentina*, 699 F.3d 246 (2d Cir. 2012); *NML Capital, Ltd. v. Republic of Argentina*, 2011 WL 9522565 at *2 (S.D.N.Y. Dec. 7, 2011); *Elliott Assocs. v. Republic of Peru* 2000/QR/92 (Ct. App. Brussels, 8th Chamber, Sept. 26, 2000).

that courts would draw a negative inference about the meaning of the existing stock of old clauses.

But coordinating the efforts of participants in multilateral markets to create a functioning network is challenging. In a recent study, my co-authors and I compared the speed with which obsolete terms are revised in private equity driven merger and acquisition transactions with public company bond issues.⁴⁷ Both types of contracts contained a standard No Recourse clause that had become obsolete over time with the introduction of limited liability under state corporate law. More recently, however, a series of prominent cases limited the protections of the standard No Recourse provision to issues of contract liability. This left shareholders vulnerable to liability claims based on tort and other equitable theories. The emerging case law should have motivated parties in both markets to modify the obsolete clause to better protect against these non-contractual claims. Yet the vast majority of the corporate bond contracts have continued to use the standard No Recourse clause, unchanged from the 1880s, confirming the difficulty of revising terms in large multilateral markets.⁴⁸ By contrast, over fifty percent of the private equity contracts were revised following a series of industry meetings in 2012, where senior lawyers exhorted their colleagues to reform their clauses.⁴⁹ Indeed, focusing just on the private equity deals done by the top five law firms in the industry, every contract after 2012 has been revised.⁵⁰

This evidence suggests that change in the private equity contracts occurred when the market was able to coordinate on a standard revision, and that the top law firms were well positioned to affect that coordination. By coalescing around a standard revision to the No Recourse clause, these firms overcame the reluctance of individual lawyers to change the language unilaterally. But lacking such a coordinating mechanism, corporate bond contracts continue to use an obsolete No Recourse term, one that now carries a significant litigation risk. These findings indicate that there are stark variations in the speed of revision across markets.

The comparison between the smaller private equity market and the larger corporate bond market illustrates a critical difference between two types of multilateral markets. In some markets, contracting parties have devised mechanisms—whether in the form of a master contract as in the case of franchises or a bureaucratic structure in the case of trade associations—that support inter-party collaborations. Much like the coordinating role of the leading law firms in merger and acquisition transactions, we can best understand the relationships

47. Stephen J. Choi, Robert E. Scott & Mitu Gulati, *Revising Boilerplate: A Comparison of Private and Public Company Transactions*, 2020 WISC. L. REV. (forthcoming 2020) (Columbia Law & Econ. Working Paper Series, Paper No. 611, 2019), <http://ssrn.com/abstract=3467350> [<https://perma.cc/UN2F-GF8Z>].

48. *Id.* (manuscript at 21).

49. *Id.* (manuscript at 23).

50. *Id.* (manuscript at 25).

among the parties to these kinds of multilateral contracts as mutual cooperators in a commercial network that has a “spider in the web”—a controlling entity or hierarchy at the center of the network that maintains stability and facilitates revisions in standardized contract terms.⁵¹ In contrast, the sovereign and corporate bond markets lack any centralizing spider to mandate changes in contract language. This coordination failure explains why no changes have occurred in the language of the No Recourse clause in the corporate bond context and why changes occurred only after many years in the case of the *pari passu* clause in Argentina’s bonds. The individual interests of the key market participants in these markets are inconsistent with their collective interests,⁵² and the diverse parties and their interest groups are constrained from acting unless and until they can assemble the critical mass of players to coordinate on the best way to revise the obsolete terms.⁵³

III

ADDRESSING THE COLLECTIVE ACTION PROBLEM THROUGH NETWORKS

In Part II, I argued that standard-form contracts in multilateral markets predictably contain obsolete and encrusted terms that undermine contractual incentives. These inefficiencies are an inevitable byproduct of the efficient production of standardized contract terms in these large-scale markets. Although in theory commercial parties are motivated to revise inefficient terms, significant barriers to collective action often prevent or substantially delay individual efforts

51. The market for derivatives is another example of parties devising a hierarchy that functions to update contract terms in light of changed conditions. The International Swaps and Derivatives Association (ISDA) frequently updates the ISDA Master Contract. The ISDA Determination Committees are a central authority to make official, binding determinations regarding the existence of “credit events” and “succession events” (such as mergers), which may trigger obligations under a credit default swap contract. For discussion of the history of the formation of the derivatives network, see Jeffery B. Golden, *Setting Standards in the Evolution of Swap Documentation*, 13 INT’L FIN. L. REV. 18 (1994); Sean M. Flanagan, *The Rise of a Trade Association: Group Interactions within the International Swaps and Derivatives Association*, 6 HARV. NEGOT. L. REV. 211 (2001).

52. In the sovereign bond case, the private interests of the lawyers, their clients (the sovereigns’ debt managers), and the investment banks were to minimize the ex ante costs of a bond issue (transaction costs plus price discounts), even where expected ex post costs (restructuring costs, the cost of holdouts, and so forth) were thereby increased by an even greater amount. In contrast, the collective interests of the same parties were to protect the “industry” and the market for sovereign bonds so that future issuances proceeded smoothly and future business could grow. See MITU GULATI & ROBERT E. SCOTT, *THE THREE AND A HALF MINUTE TRANSACTION: BOILERPLATE AND THE LIMITS OF CONTRACT DESIGN* 140–51 (2012).

53. Change ultimately did occur in the case of the Argentine bonds, but not until three years after the Second Circuit Court of Appeals upheld an interpretation of the *pari passu* clause that put all future efforts to restructure the Argentine bonds at risk. Revision to the *pari passu* clause had to be “settled” among the key parties, since private interests demanded “standard” legal terms that minimized the ex ante costs of placing the bonds in the market. Choi, Gulati & Scott, *supra* note 43, at 12–14. Coordination did not occur, therefore, until a conference at Columbia Law School in early October 2014 gathered the key parties together. *Id.* The Columbia meeting appeared to make clear to those present that coordination attempts were not proceeding smoothly and the result was a subsequent meeting of the key players at the offices of the New York Federal Reserve Bank at which coordination did occur. *Id.* at 18.

to repair latent defects in the standard terms. But the parties to multilateral contracts are not isolated dyads in a bespoke transaction: their participation in this larger market motivates them to seek a means of coordinating with others in the market who are similarly bound to the standardized terms. In this Part, I explore ways in which parties in certain multilateral markets have overcome coordination impediments by forming functioning networks designed to solve common problems.

A. Solving Common Problems in Multilateral Markets Through Networks

Commercial networks are mechanisms for coordination and cooperation between formally independent but functionally interdependent entities. They provide parties in multilateral markets indispensable cognitive resources—knowledge about the world and its possibilities—and frameworks for addressing coordination problems that can reduce the costs of conventional forms of standardized contracting.⁵⁴ Parties in thick markets have limited information about the universe of possible partners. It follows that it is worthwhile to search for potential partners who know, or might quickly discover, solutions a single party could not reach alone.⁵⁵ However, potentially successful collaborators would struggle to find one another without the information that commercial networks provide.⁵⁶ The more extensive and dense an initial network of connections, the higher the chances of finding promising partners. Viewed from the vantage point of the candidate partner rather than the party searching for a collaborator, the better connected you are, or the more central your position in a relevant network, the more likely you are to be found, and the better your chances of entering a new collaboration aimed at coordinating on collective goals.⁵⁷

It is appropriate, therefore, to conceive of the diverse contracting parties in multilateral markets as potential members of a network of collaborators empowered to solve coordination and collective action problems. All of the participants in the market stand to be harmed by the inefficiencies of standardization, yet no single party can successfully update standard terms as conditions change or adjust to aberrant judicial interpretations of ossified

54. See Lisa Bernstein, *Beyond Relational Contracts: Social Capital and Network Governance in Procurement Contracts*, 7 J. LEGAL ANALYSIS 561, 563 (2016).

55. Networks that form to obtain information about potential partners, including most famously the bio-tech collaborations in Silicon Valley, have been widely studied by organizational sociologists. See, e.g., Walter W. Powell, Kenneth Koput & Laurel Smith-Doerr, *Inter-Organizational Collaboration and the Locus of Innovation: Networks of Learning in Biotechnology*, 41 ADMIN. SCI. Q. 116 (1996); Walter W. Powell, *Inter-Organizational Collaboration in the Biotechnology Industry*, 152 J. INST. & THEORETICAL ECON. 197 (1996).

56. For discussion, see AVINASH DIXIT, *LAWLESSNESS AND ECONOMICS: ALTERNATIVE MODES OF GOVERNANCE* (2004) (showing how the potential for reputation-based exchange diminishes with distance, whether physical or social).

57. For discussion, see generally Yves L. Doz, *The Evolution of Cooperation in Strategic Alliances: Initial Conditions or Learning Processes?*, 17 STRAT. MGMT. J. 55 (1996); Bruce Kogut, *A Study of the Life Cycle of Joint Ventures*, 28 MGMT. INT. REV. 39 (1988).

boilerplate. By forming a network, the parties in multilateral markets can collectively ameliorate these inefficiencies.

B. Two Prototypes: Trade Associations and Supply Chains

There are several multilateral markets where the need to optimize the tradeoff between efficient contract production and efficient contractual incentives has motivated the creation of networks that collectivize the contracting process. Scholars have long observed organized networks of cooperatives and trade associations where members collectivize the contracting process by providing standard contract terms that are updated as conditions change and enforced through a private dispute settlement regime. Lisa Bernstein's interesting work on the cotton and grain industries is one such example.⁵⁸ In the cotton industry, dealers in cotton and cotton mills have, since the 1920s, adopted standard contracts governing transactions between association members that are periodically updated by the trade association. Arbitration panels, which have the benefit of deep knowledge of the form contract and of industry practices, resolve disputes among members.⁵⁹ The combination of low uncertainty in these markets and the continually updated industry standard contracts has resulted in a collective equivalent of state contingent contracts—a contract that is continually updated in response to changed conditions that could not be anticipated *ex ante*—and a pattern of very low rates of arbitration.⁶⁰

Networks have also evolved to capture scale economies in manufacturing supply chains.⁶¹ Unlike the trade association pattern, here the level of uncertainty makes the development of highly specified standardized contracts unworkable. Consider the auto industry, for example, where uncertainty-driven disruption has led over the past fifty years to vertical disintegration and the development of

58. Lisa Bernstein, *Private Commercial Law in the Cotton Industry: Creating Cooperation Through Rules, Norms, and Institutions*, 99 MICH. L. REV. 1724 (2001) [hereinafter Bernstein, *Private Commercial Law in the Cotton Industry*]; see also Lisa Bernstein, *Merchant Law in a Merchant Court: Rethinking the Code's Search for Immanent Business Norms*, 144 U. PA. L. REV. 1765, 1771–77 (1996) (discussing rules of the National Grain and Feed Association, which require that all disputes among members must be submitted to the Association's arbitration system).

59. Dealers in cotton have jointly adopted the Southern Mill Rules to govern transactions between their members. The Rules are revised annually, and changes are announced at annual meetings and widely circulated. Both trade associations have established a joint arbitration panel to hear all disputes under the Rules (except those concerning quality, which are referred to a separate body). Annual review by the trade associations assures that regularities in trade practice that contribute to generally beneficial outcomes are identified and incorporated into the Rules. As Bernstein notes, "given the amount of detail in the trade rules, cases involving contractual gaps are uncommon." Bernstein, *Private Commercial Law in the Cotton Industry*, *supra* note 58, at 1736. In fact, given the clarity and comprehensive character of the rules, disputes of any kind under the rules are infrequent. *Id.*

60. This efficient capture of scale economies is critically dependent, however, on the low level of uncertainty. In the post-2011 period, when the volatility of cotton prices jumped significantly, contract breaches between farmers and merchants and merchants and mills increased substantially, as did recourse to the formal arbitration procedure. Michael Rothfeld & Carolyn Cui, *Plague of Broken Contracts Frays Cotton Market*, WALL ST. J. (Aug. 30, 2012), <https://www.wsj.com/articles/SB10000872396390444772404577589611222756168> [<https://perma.cc/JYT6-MS4V>].

61. For discussion, see generally Bernstein, *supra* note 54.

bilateral collaborative supply chain contracts.⁶² That shift, in turn, has created a demand in the market for information about potential partner-suppliers. As an exemplar of the changes in the industry, a collaborative contract has emerged between General Motors (GM) and its suppliers that specifies an iterative process designed to produce information about the counterparty's skills before commitments are made to produce or purchase anything.⁶³ The cost of this switch to collaborative contracts, however, has been a loss of scale in information gathering: knowledge about the capacity of each potential supply partner can be gathered only through iterative exchange, one partner at a time. The upshot is that GM and the other original equipment manufacturers of supply chain networks have developed a way to scale the production of information about potential suppliers. By facilitating the sharing of information gained in the bilateral contracts that govern the links in the new supply chains, important elements of information production shift, in part, from bilateral to multilateral. In effect, these supply chain networks reduce the costs of contracting in thick markets by supporting a reputation market, which in turn reduces the search costs associated with finding new contracting partners.⁶⁴

Both the trade association and supply chain networks form around or are formed by a governance structure that exercises some control over the coordinating efforts in the network. These structures deploy standard contractual mechanisms—whether in the form of a framework agreement in the case of the auto industry or a bureaucratic contractual structure in the case of trade associations—that support network collaboration. These relationships have a “spider” at the center of the network that facilitates coordination.⁶⁵ Other networks, however, lack a controlling structure; they are webs without any spider. Examples include the sovereign debt and corporate bond markets, as well as the proliferation of strategic alliances in technology-intensive settings.⁶⁶ These

62. U.S. automobile makers such as General Motors, who acquired suppliers in the 1920s, were often invoked to illustrate the imperatives of vertical integration. Yet today in every sector of the economy, including especially the automobile industry, we see vertical integration replaced by supply chains linked together by previously unknown forms of collaborative contracting.

63. In the last several years, as market conditions have improved generally, GM has successfully introduced a fundamentally new regime of contract governance with its suppliers, based on the kinds of information sharing and review that are key to innovative collaboration under uncertainty. See Bob Trebilcock, *How They Did It: Supplier Trust at General Motors*, SUPPLY CHAIN MGMT. REV. (2017), http://bt.e-ditionsbyfry.com/publication/?m=24891&i=408179&view=articleBrowser&article_id=2783132&ver=html5 [<https://perma.cc/VX2M-EJSD>].

64. The unchallenged assumption over many years has been that these information networks are entirely benign, providing valuable resources to network participants with no negative effects. Recently, however, Matt Jennejohn has shown that in high technology settings the network is also a source of offsetting costs, as valuable intellectual property rights can bleed out of a collaboration between two contracting parties and into the network at large. See Matthew Jennejohn, *The Private Order of Innovation Networks*, 68 STAN. L. REV. 281, 291–94 (2016); Matthew Jennejohn, *Do Networks Govern Contracts?* 8–12 (Working Paper, 2019) [hereinafter Jennejohn, *Do Networks Govern Contracts?*].

65. Porat & Scott, *supra* note 11, at 15–16.

66. Strategic alliance networks act as conduits for the flow of private information about resources and capabilities. The knowledge that is created by the information exchange within the individual alliances diffuses throughout the network. Thus, the network becomes a reservoir of all the informational

“spiderless” networks have fewer legal mechanisms to control the agency costs and free-riding risks that impede coordination efforts. As a consequence, the evidence shows that spiderless networks are fragile and often fail to solve collective action problems readily, despite the evident benefits to network members from inter-firm cooperation.⁶⁷

C. Regulatory Networks

When the level of uncertainty is very high, coordinating around common goals becomes even more challenging. Contracting parties are unsure about the correct approach to a problem common to all, and network formation may require the assistance of an external coordinating agent. Here is where we may see the active participation of the state in coordinating efforts to form a “regulatory network.” The aim of such a regulatory regime is to organize joint exploration of possibilities for joint problem solving. In this sense, the problem is the thick market analogue to bilateral contracting in uncertain markets,⁶⁸ but with scale now making possible public facilitation of collaboration. This pattern is especially suited to efforts to mitigate exogenous risks that can only be addressed through exacting, common efforts by all market participants.⁶⁹

Food safety illustrates the class of risk that induces formation of this type of regulatory network.⁷⁰ A particularly salient example is the U.S. leafy greens market, comprised of numerous highly diverse farms growing lettuce, spinach, and related produce, and the large wholesaler-processors who buy their output. Because produce from a single farm is combined with produce of other farms for distribution, contamination at a single farm can lead to disease outbreaks that affect overall consumption, and hence significantly reduce the sales for all parties. All the parties in the food supply chain—growers, processors, distributors, and

value that accumulates within that particular sphere of economic activity. The prototype of these strategic alliances is the biotech network consisting of a university or research entity, a number of biotech companies, large pharmaceutical firms, and venture capital firms. Balaji R. Koka & John E. Prescott, *Designing Alliance Networks: The Influence of Network Position, Environmental Change and Strategy on Firm Performance*, 29 STRATEGIC MGMT. J. 639, 640 (2008). See also Michael Hergert & Desmond Morris, *Trends in International Collaborative Agreements*, in COOPERATIVE STRATEGIES IN INTERNATIONAL BUSINESS 99 (Farok J. Contractor & Peter Lorange eds., 1988) (analyzing the increasing use of collaborative agreements between international partners); David T. Robinson & Toby E. Stuart, *Network Effects in the Governance of Strategic Alliances*, 23 J.L. & ECON. ORG. 242, 245 (2006) (stating that over 5,500 alliances between dedicated biotechnology firms, pharmaceutical firms, and universities have been formed since the mid-1970s).

67. Porat & Scott, *supra* note 11, at 15–16. For a contemporary illustration of the failure of parties in the large, spiderless bio-tech network to organize successfully to solve vexing spillover problems that cannot be addressed through bilateral contracting, see Jennejohn, *Do Networks Govern Contracts?*, *supra* note 64.

68. See *supra* discussion in Part II.A.

69. See Ronald J. Gilson, Charles F. Sabel & Robert E. Scott, *Text and Context: Contract Interpretation as Contract Design*, 100 CORNELL L. REV. 23, 70–73 (2014) (discussing how parties “can take advantage of economies of scale to design a legally sophisticated interpretive regime”).

70. See Charles F. Sabel & William H. Simon, *Contextualizing Regimes: Institutionalization as a Response to the Limits of Interpretation and Policy Engineering*, 110 MICH. L. REV. 1265, 1274–85 (2012) (detailing the recent evolution of food regulation in the United States).

retailers—therefore have an interest in protecting their market by developing a network that reduces the chances for contamination. And the state, as the protector of public health, has complementary interests. However, the actors in this industry did not form a single community, and that diversity of interest made coordination and effective collective action infeasible without the assistance of regulatory entities.⁷¹

In 2007, after an outbreak of illness, the Food and Drug Administration embarked on a program to encourage and assist state and private efforts in building a contractual network for leafy greens.⁷² The California growers' association, collectively accounting for roughly ninety-nine percent of California leafy green production,⁷³ petitioned the state to recognize a proposed Marketing Agreement.⁷⁴ The master contract that created the network designates safety standards that require growers and processors to prepare plans for identifying all hazardous control points and to detail the steps they have taken to mitigate the hazard.⁷⁵ Members must commit to a monitoring and reporting regime to verify the efficacy of any precautionary actions that are undertaken.⁷⁶ The network relies on informal enforcement: the members commit to deal only with farms that comply with the contract's standards.⁷⁷ As in the case of low-uncertainty networks, such as the cotton industry trade associations, the ultimate sanction for noncompliance with formal procedures is suspension or withdrawal of a recalcitrant member's right to use a service mark.⁷⁸ In this way, the state-sanctioned Marketing Agreement provides the coordinating function crucial to the success of the regulatory network.

71. *Id.* at 1287.

72. Marian Burros, *F.D.A. Offers Guidelines to Fresh-Food Industry*, N.Y. TIMES (Mar. 13, 2007), <https://www.nytimes.com/2007/03/13/washington/13fda.html> [<https://perma.cc/39P5-RSR6>]. The agency also pointed to insufficient enforcement resources. *Id.*

73. See Proposed National Marketing Agreement Regulating Leafy Green Vegetables, 76 Fed. Reg. 24,292 (proposed Apr. 29, 2011); see also Varun Shekhar, *Produce Exceptionalism: Examining the Leafy Greens Marketing Agreement [LGMA] and its Ability to Improve Food Safety*, 6 J. FOOD L. & POL'Y 267 (2010) (evaluating the benefits and weaknesses of the LGMA in ensuring food safety).

74. California production, in turn, accounts for about seventy-five percent of national production. CAL. DEP'T OF FOOD & AGRIC., CALIFORNIA LEAFY GREENS HANDLER MARKETING AGREEMENT (2015), <https://www.cdfa.ca.gov/mkt/mkt/pdf/LeafyGreensProductsHandlerMktAgmt.pdf> [<https://perma.cc/KL6N-CFQ6>]. The growers were acting under the authority of a state marketing act that confers antitrust immunity for various purposes on organizations of agricultural producers. Sabel & Simon, *supra* note 70, at 1280.

75. See CALIFORNIA LEAFY GREENS HANDLER MARKETING AGREEMENT, *supra* note 74, at art. V (requiring members to maintain a "trace-back system" subject to verification, inspection, and compliance reports).

76. See *id.* (discussing the requirement that members must follow the Agreement's Best Practices in order to use the official Service Mark of the Agreement). See generally CAL. LEAFY GREEN PRODS. HANDLER MKTG. BD., COMMODITY SPECIFIC FOOD SAFETY GUIDELINES FOR THE PRODUCTION AND HARVEST OF LETTUCE AND LEAFY GREENS (2011), <http://www.leafygreenguidance.com/book/export/html/1> [<https://perma.cc/5HQH-AECL>] (containing various provisions that impose record-keeping requirements on signatory handlers).

77. CALIFORNIA LEAFY GREENS HANDLER MARKETING AGREEMENT, *supra* note 74, at art. V.

78. *Id.*

The networks just described have been formed to address a variety of common risks, including, but certainly not limited to, the inefficiencies of standardized contract terms that have plagued the sovereign debt market and have also affected (perhaps to a lesser extent) the corporate bond market.⁷⁹ The trade associations studied by Bernstein illustrate how consistent updating and private enforcement can optimize the tradeoff between efficient contracting and efficient contract production. Other networks coordinate to solve different problems, as seen in the case of supply chains. As levels of uncertainty increase, common problems range from the use of networks to acquire information about potential partners in a rapidly changing environment to the prevention of latent defects through a public-private regulatory intervention. The common theme in all of these examples is that successful networks can reduce the costs of deficient contract design in multilateral environments.

In Part IV, I take up the normative question, asking whether the mechanisms that have improved the efficiency of contracting in the multilateral markets discussed above can offer fresh insights on a problem that has thus far largely defied consensus solution: how best to regulate thick market consumer transactions and reduce the contracting inefficiencies that can be used to exploit consumer ignorance.

IV

NORMATIVE IMPLICATIONS: RETHINKING THE REGULATION OF CONSUMER MARKETS

A. The Failure of the Unitary Regime of Contract Law

The paradox of contracting in markets leads one to rethink familiar forms of contracting and to challenge the limitations of conventional understandings of contract. Of these conceptual limits, none is more fundamental (and perverse) than the idea that vastly different agreements—such as those between two large manufacturing firms, issuers and holders of corporate bonds, or retail sellers and individual consumers—are all similar enough to be treated as a single conception of contract. Yet, under traditional legal principles, all bespoke bilateral contracts between firms, all multilateral debt contracts, and all internet-based consumer contracts are governed by a unitary regime of contract law.

This paradigm of the unitary, bilateral contract—derived from the common law of contract as it developed after the industrial revolution—has dominated contemporary analysis of consumer markets. Yet the paradigm has yielded only a single point of agreement: none of the current approaches to reducing the risk

79. Choi, Scott & Gulati, *supra* note 47, at 26–29; see also Glen D. West & Natalie Smeltzer, *Protecting The Integrity of the Entity-Specific Contract: The “No Recourse Against Others” Clause—Missing or Ineffective Boilerplate?*, 67 BUS. LAW. 39 (2012) (arguing that a failure of the corporate bond market to coordinate around a revision to the standard “no recourse against others” clause risks significant liability for creditors issuing corporate bonds).

of exploitation in consumer transactions have worked.⁸⁰ If there is any consensus, it is that disclosure does not work well in consumer markets because information overload deters consumers from assessing the many different terms offered to them in the standardized contracts used in consumer transactions.⁸¹ Beyond that pessimistic consensus, there is no agreement on the problem and therefore no agreement on possible solutions to the problem of inefficient and exploitative terms in consumer contracts.

B. Reconceiving Consumer Transactions as Multilateral Contracting

To make some headway, we must first see if we can reframe the problem. The core difficulty is that many scholars continue to think of consumer transactions using the bilateral contracting framework that applies to bespoke agreements in thin markets. But despite calls by academics for more common law rules that will equip courts with the tools to police consumer contracts,⁸² no such developments have occurred. One reason, surely, is that courts are peculiarly ill-suited to the task. The first step, therefore, is to recognize that contract doctrine created and applied to bilateral and bespoke contracting has little relevance for ameliorating problems in thick, multilateral consumer markets. All the available empirical evidence suggests that the problem that occupied consumer advocates fifty years ago—grossly exploitative terms in fine print in bilateral agreements between individual consumers and retail sellers—is no longer the most pressing concern.⁸³ The contemporary reality is the proliferation of “rolling contracts,” where key terms and conditions of the agreement often follow rather than precede the decision to purchase a product, and internet transactions where “click-wrap” and “browse-wrap” terms lead consumers to accept contracts without any examination of their content.⁸⁴ These consumer transactions occur in multilateral

80. See *supra* text accompanying notes 12–13.

81. See Omri Ben-Shahar & Carl Schneider, *The Failure of Mandated Disclosure*, 159 U. PA. L. REV. 647 (2011) (discussing many ways of showing the failure of mandated disclosure).

82. See MARGARET JANE RADIN, *BOILERPLATE: THE FINE PRINT, VANISHING RIGHTS, AND THE RULE OF LAW* 197–216 (2013) (arguing for using tort law rather than contract in certain cases as part of a broad oversight of boilerplate clauses by courts, legislators, and regulatory agencies); see also Robert A. Hillman, *The “New Conservatism” in Contract Law and the Process of Legal Change*, 40 B.C. L. REV. 879 (1999); Ralph Mooney, *The New Conceptualism in Contract Law*, 74 OR. L. REV. 11 31 (1995).

83. The paradigmatic case of judicial review of abusive terms in bilateral consumer contracts is *Williams v. Walker-Thomas Furniture Co.*, 350 F.2d 445 (D.C. Cir. 1965). There are several reasons why clauses such as the fine print, unintelligible cross-collateral clause in *Williams* are no longer the central focus of regulation. Market forces control some of the more venial abusive practices in bilateral consumer contracts. More importantly, however, the vast majority of states have enacted retail installment sales acts that have prohibited the worst examples of abusive practices. Retail installment sales acts preclude signing contracts in blank, require disclosure of credit terms, provide for cooling off periods, prohibit balloon payments and add on clauses, and regulate prepayment penalties. See, e.g., Retail Installment Sales Act, N.J. REV. STAT. § 17:16C-1 (2013). In addition, the Federal Trade Commission has outlawed purchase money security interests in household goods and has prevented finance companies from claiming holder in due course status to insulate them from warranty claims against the consumer paper that they purchase. See 16 C.F.R. Part 433 (1977); 16 C.F.R. § 444.2 (1984).

84. “Click-wrap” refers to terms presented to consumers in fine print requiring acceptance by clicking “I agree” prior to entering the website. “Browse-wrap” refers to websites that list the terms in

markets where, as I have argued above, production efficiency inevitably leads to inefficient contract terms.

There is some evidence that scholars who study consumer transactions are attempting to shift the paradigm away from the classic bilateral contract in which each party assents to terms presented by the other. The proposed Restatement of the Law of Consumer Contracts abandons the fiction of mutual assent in consumer contracting and substitutes instead the ex post regulation of abusive terms.⁸⁵ Unfortunately, the drafters then propose to rely on the doctrine of unconscionability, returning once again to the bilateral paradigm by asking common law courts to identify exploitative terms in litigation.⁸⁶ But the history of the unconscionability doctrine provides little hope that this proposal will root out inherent inefficiencies caused by standardization.⁸⁷ Moreover, even the modest acknowledgment in the proposed Restatement that the common law paradigm is inapposite to consumer transactions has provoked a sharp response: the widespread negative reaction of consumer advocates to the proposed abandonment of the concept of assent is the best evidence of the continuing power of the bilateral frame.⁸⁸

To be sure, all markets, including thick ones, are not barriers to fraud or abusive behavior short of fraud, but there is little evidence that abuse of market power is the major problem in multilateral consumer contracts characterized by

other parts of the site and require consumers to click that they have read and agreed to them. The data show that in neither case do consumers read the terms. In fact, the typical time before a consumer clicks “I agree” is one second. For a review of the empirical literature, see Florencia Moratta-Wurgler, *Does Anyone Read the Fine Print? Consumer Attention to Standard-Form Contracts*, 43 J. LEGAL STUD. 1, 2 (2014).

85. See RESTATEMENT OF CONSUMER CONTRACTS § 2, cmt. 13 (AM. LAW INST., Tentative Draft, 2019) (arguing that while the mutual assent doctrine was once “a meaningful mechanism” to protect consumers, the ubiquity of standard-form contracts has “diluted the effectiveness and plausibility of such front end self-protection”).

86. *Id.* § 5, cmt. 1.

87. The majority of states, for example, require a showing of both substantive and procedural unconscionability. Susan Landrum, *Much Ado About Nothing?: What the Numbers Tell Us About How State Courts Apply the Unconscionability Doctrine to Arbitration Agreements*, 97 MARQ. L. REV. 751, 767 (2014). This means that a plaintiff must demonstrate *both* that its counterparty engaged in unfair bargaining practices, such as including terms in extremely fine print, *and* that the resulting contract was unfair. *Id.* at 768–70. The standard response of sellers has been to draft their standard contract terms in larger fonts, using capital letters to highlight salient legal language. The further problem, of course, is that consumers must recognize that they have the legal right to seek redress for an unconscionable contract. Recent experimental evidence suggests that consumers may fail to pursue legitimate claims owing to a misplaced belief that unfair terms are legally permissible. Meirav Furth-Matzkin & Roseanna Sommers, *Consumer Psychology and the Problem of Fine Print Fraud*, 72 STAN. L. REV. (forthcoming 2020) (manuscript at 20), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3378353 [<https://perma.cc/FL82-XW8S>].

88. Following the promulgation of the Draft Restatement, twenty-three Attorneys General sent a letter to the membership of the American Law Institute urging the members to reject the proposed Restatement owing to its abandonment of the concept of assent. See Letter from Letitia James, Attorney Gen. of N.Y., to the Membership of the Am. Law Inst., (May 14, 2019), https://ag.ny.gov/sites/default/files/letter_to_ali_members.pdf [<https://perma.cc/D895-EBMU>]. Following this letter, little action was taken on the proposed final draft in the May 2019 meeting of the American Law Institute.

boilerplate terms.⁸⁹ Rather, the problem in multilateral consumer markets, as in multilateral markets generally, is that standardization produces deficient terms. As predicted by the paradox set out above, many terms in standard-form consumer contracts are either obsolete⁹⁰ or, as found by the Reporters of the proposed Restatement, encrusted with “unintelligible legalese.”⁹¹ Given the gross information asymmetries between commercial sellers and consumer buyers, the costs of those deficiencies are likely visited primarily on the consumer. A major challenge, therefore, for any regulatory intervention in large consumer markets is to distinguish these inefficient terms from those that efficiently allocate risks between consumers and sellers. Such an inquiry is peculiarly unsuited to judicial, common law determinations, but it is available to regulators through well-conceived data-driven investigations.⁹²

A further problem in consumer markets is salience. Psychological evidence suggests that individuals selecting among alternatives are incapable of accurately evaluating more than five to seven product attributes in any given transaction.⁹³ But multilateral consumer contracts typically contain many more boilerplate terms than the data suggest parties can intelligently evaluate. Each of these terms describes product attributes or performance obligations that are functionally a part of the product. Moreover, collective action problems that also exist on the seller side of this multilateral market will motivate sellers to continue to produce terms that contain these non-salient attributes, thereby permitting them to compete on the salience of the price term. The challenge, then, is how to create both clarity and salience in those terms that are most relevant to consumer choice.⁹⁴

89. See Florencia Moratta-Wurgler, *Competition and the Quality of Standard Form Contracts: The Case of Software License Agreements*, 5 J. EMPIRICAL LEGAL STUD. 447, 447 (2008) (finding “little evidence” that firms with market power “require consumers to accept particularly one sided terms”).

90. A classic example of an obsolete term is the folk story of the standard default insurance charge in rental car contracts. Originally set for drivers as young as twenty-one, it has not been revised to reflect the increase in the rental age to twenty-five. This add-on insurance is among the most expensive in terms of risk and coverage available on the market. For a discussion of the inefficiencies of add-on insurance products, see Tom Baker & Peter Seligman, “*You Want Insurance with That?*”; *Using Behavioral Economics to Protect Consumers from Add-on Insurance Products*, 20 CONN. INS. L.J. 1 (2013).

91. See RESTATEMENT OF CONSUMER CONTRACTS, *supra* note 85, § 2, reporters’ notes (arguing that “informed consent to the standard contract terms is, by and large, absent in the typical consumer contract”). Encrustation that leads to the unintelligible language referenced on the Restatement draft generates inefficiencies even when the original un-encrusted term is efficient. The loss of comprehension aggravates the salience problem that consumers face when seeking to compare numerous and/or difficult to understand contract terms.

92. See Natasha Sarin, *Making Consumer Finance Work*, 119 COLUM. L. REV. 1519, 1524–31 (2019) (using a large data study showing that legislative restrictions on bank overdrafts and credit card penalty fees and interest rate increases did not result in a corresponding increase in consumer costs while caps on debit interchange fees exacerbated the market failure it sought to correct).

93. See Russell Korobkin, *Bounded Rationality, Standard Form Contracts, and Unconscionability*, 70 U. CHI. L. REV. 1203, 1227 (2003) (reviewing empirical research suggesting that “the number of attributes decision-makers are likely to investigate . . . when choosing between alternatives is surprisingly modest . . . perhaps as few as five”).

94. Several scholars have identified the significance of the salience problem and proposed different solutions. Russell Korobkin suggests using the unconscionability doctrine to scrutinize non-salient terms

How then should the state approach the problems of obsolete and encrusted terms in consumer contracts, which the preceding analysis suggests will inevitably be present in these multilateral markets? The problem that consumers face is similar in kind to that facing the purchasers of sovereign or corporate debt. The inability to coordinate around more efficient contract terms suggests that consumers do not accurately price the terms they accept. Given the information asymmetry assumption, those pricing errors are rents that producers capture in these markets. Moreover, unlike the members of the cotton growers trade association, there is no hierarchical institution that can serve as the spider in the network whose task is to coordinate around more efficient terms. When the level of uncertainty is very high, we have seen that network formation often requires the introduction of an external coordinating agent. The answer in this class of cases lies in the use of the state, not as a regulator of individual contracts, but as the substitute spider. In this role, the state can coordinate efforts to produce more efficient consumer contracts and relieve buyers in these markets of a disproportionate burden of the costs inherent in the current process of producing consumer contracts.

C. Templates for a Consumer Regulatory Network

The emerging regime in the European Union (E.U.) offers both a starting point and a cautionary lesson for how to induce a regulatory network that separates agreements deserving special scrutiny from contracts between legally sophisticated parties.⁹⁵ The E.U. has chosen to separate contracts with consumers from the larger body of general contract law and to regulate consumer markets through several directives coordinating standards of consumer protection. A central element of the E.U.'s consumer contract regime is the Directive on Unfair Terms in Consumer Contracts, which contains a non-exhaustive, "gray" list of seventeen potentially unfair contract terms.⁹⁶ Similarly, the Unfair Commercial Practices Directive lists "commercial practices which are in all circumstances considered unfair" to the consumer.⁹⁷ The aim here is to establish rules of commercial good conduct for evaluating standard-form consumer contracts where consumers may be especially vulnerable to exploitation; to ban standardized terms that serve only the interests of one party to the transaction; and to do this without affecting the contract law that generally governs agreements between commercial parties. Unfortunately, there are still important gaps in the E.U.'s regime. The most significant is the absence of a comprehensive and reliable mechanism for updating the lists of prohibited and suspect

in standardized consumer contracts. *Id.* at 1256–66. Ian Ayers and Alan Schwartz propose a novel experiment to aid regulators in identifying and then highlighting the most salient terms. Ian Ayers & Alan Schwartz, *The No-Reading Problem in Consumer Contract Law*, 66 STAN. L. REV. 545, 552–54 (2014). Natasha Sarin argues that well designed regulatory interventions, including a "salience shock," can work to overcome the salience problem. Sarin, *supra* note 92, at 1560–68.

95. This part draws on Gilson, Sabel & Scott, *supra* note 21, at 75–86.

96. Council Directive 93/13/EEC on Unfair Terms in Consumer Contracts, annex, 1993 O.J. (L 95).

97. Council Directive 2005/29/EC, annex I, 2005 O.J. (L 149).

boilerplate contract terms.⁹⁸ Without a mechanism for systematic, continued review and update, there is both the risk that inefficient boilerplate terms take hold before they are clearly condemned and that the enforcement of restrictions that lose their relevance to consumer protection will burden commerce.⁹⁹

Developing a method of updating any regulatory intervention is critical, therefore, to the successful introduction of a spider in the web. Updating is the cornerstone of an experimentalist commitment to regulatory intervention.¹⁰⁰ The best evidence of which kinds of interventions will or will not succeed is the experience gained from initial efforts to solve the collective action problems that lead to obsolete and exploitative terms. A system of updating provides a means of benchmarking from past successes and failures and, not incidentally, offers additional benefits in ensuring that regulatory interventions are subject to a form of “sunsetting” that compels abandonment of unsuccessful interventions.¹⁰¹

Notwithstanding its limitations, the E.U. regime does illustrate how courts might function in a multilateral consumer network. Here, the national courts of the member states play a quasi-administrative function—drawing the attention of home-state regulators to possibly unfair terms. In turn, the European Court of Justice acts as a judicial backstop, correcting unintended consequences of the network.¹⁰² This regulatory network differs from conventional adjudication by treating each case not only as a matter of fairness to an individual claimant, but also as a potential indication of systemic failure and an opportunity for improvement for all consumers in the particular market. By establishing a similar quasi-administrative regime through appropriate state or federal legislation, American contract law could accomplish two critically important goals: first, regulating standardized consumer transactions more effectively and appropriately; and second, freeing sophisticated commercial parties from constraints that are inapt to their circumstances.

98. In 2008, the E.U. did try to incorporate a sophisticated updating mechanism into a proposed revision of Directive 93/13. This mechanism would have enlisted courts in the task of updating the register of impermissible terms without empowering the courts to routinely question the express meaning of agreements so as to undercut the autonomy of commercial parties to design contracts free from such regulation. But resistance by the European Parliament to the committee updating procedure and by consumer groups against corresponding limitations on the right of member states to supplement E.U. consumer protections doomed this proposal. Instead, the Consumer Rights Directive of 2010 includes no updating mechanism. *Id.* at 77–80.

99. There is substantial anecdotal evidence that the absence of an updating mechanism in the E.U. directive has led to a proliferation of ill-conceived “suspect” terms. See Przemysław Pałka, Research Scholar & Fellow in Private Law, Comments at The Market as a Legal Construct Symposium at Yale Law School (Sept. 21, 2019).

100. See Charles Sabel & William Simon, *Minimalism and Experimentalism in the Administrative State*, 100 GEO. L.J. 53, 54–56 (2011) (arguing for governance mechanisms that compensate for the absence of ex ante knowledge).

101. See, e.g., David L. Weimer, *Claiming Races, Broiler Contracts, Heresthetics, and Habits: Ten Concepts for Policy Design*, 25 POL’Y SCI. 135, 152 (1992) (“[O]nce routines become established, making major program changes becomes difficult. Therefore, the possibility of error should be anticipated in policy designs by creating mechanisms for its detection and correction.”).

102. See, e.g., Case C-412/06, Annelore Hamilton v. Volksbank Filder eG, 2008 E.C.R. I-02383.

It may yet be possible to apply the lessons learned from the E.U. example to the formation of a consumer contract regulatory network in the United States even in the absence of encompassing legislation to that effect. For example, considerable authority to regulate terms in consumer markets is currently embodied in both the legislation creating the Consumer Financial Protection Bureau (CFPB) and the authority of the new CFPB and the Federal Trade Commission to regulate “unfair, deceptive or abusive acts and practices.”¹⁰³ As the preceding discussion suggests, the baseline for determining reasonable boilerplate terms in any given consumer market cannot come from generalist courts. The information needed to answer this question can, however, be developed through the rule-making process of administrative agencies charged with the task of regulating transactions in particular markets.

A particularly salient example of just such a process is the action by the CFPB in issuing a model “plain language” form for credit card contracts.¹⁰⁴ Importantly, use of the model form is not mandatory for banks and other entities that extend credit to consumers. Rather, the use of a model form provides a safe harbor for creditors or lessors.¹⁰⁵ Thus, it is conceived as a default from which the regulated entities may depart at their option. From the vantage point of the claim here—that multilateral contracts are inevitably obsolete and encrusted—this safe harbor approach is an even more valuable tool than its advocates realized initially. The conventional justification offered in support of a safe harbor standard-form contract is that the use of officially blessed terms functions as a nudge to induce parties to conform to best practices.¹⁰⁶ But a safe harbor regulatory strategy functions even more importantly to eliminate deficient terms, whether obsolete or encrusted or both, in the course of formulating the model form. The objective, then, is not to impose the terms and conditions of consumer

103. 12 U.S.C. § 5531(a) (2018). An official report by the CFPB describes this project in the following terms:

The Consumer Financial Protection Bureau will aim to bring clarity to the marketplace. A fair, efficient, and transparent market depends upon consumers’ ability to compare the costs, benefits, and risks of different products effectively and to use that information to choose the product that is best for them. Fine print and overly long agreements can make it difficult for consumers to understand and compare products, and that obstacle to sound markets is not removed by disclosures that are too complicated or that do not focus on the key information consumers need. The principal role of consumer protection regulation in credit markets is to make it easy for consumers to see what they are getting and to compare one product with another, so that markets can function effectively.

CONSUMER FIN. PROT. BUREAU, BUILDING THE CFPB: A PROGRESS REPORT 10 (July 18, 2011).

104. See generally CONSUMER FIN. PROT. BUREAU, 2013 INTEGRATED MORTGAGE DISCLOSURE RULE UNDER THE REAL ESTATE SETTLEMENT PROCEDURES ACT (REGULATION X) AND THE TRUTH IN LENDING ACT (REGULATION Z), <https://www.consumerfinance.gov/policy-compliance/rulemaking/final-rules/2013-integrated-mortgage-disclosure-rule-under-real-estate-settlement-procedures-act-regulation-x-and-truth-lending-act-regulation-z/> [<https://perma.cc/6B94-G7X3>].

105. 15 U.S.C. § 1604(b) (2018).

106. For much more on nudges, see RICHARD H. THALER & CASS R. SUNSTEIN, NUDGE: IMPROVING DECISIONS ABOUT HEALTH, WEALTH, AND HAPPINESS (2009).

contracts but rather to provide a continuously updated baseline of efficient terms against which existing practices can be measured.

The safe harbor contract form also helps to inform the empirical question that courts have been unable to answer successfully in adjudicating unconscionability claims in bilateral disputes: Is the disputed term “oppressive” or “unreasonably favorable” to one of the parties?¹⁰⁷ Unmoored standards such as these cry out for a baseline, and courts have time and again declined to intervene because they do not have one.¹⁰⁸ What a generalist court can do, however, is assess the facts in individual disputes and measure the distance between a regulatory baseline and the contractual terms and conditions in a disputed contract. By asking courts to engage in this more limited role, a jurisprudence of legally significant deviations from the baseline can emerge over time. That experience, in turn, would inform the updating mechanism by which the relevant agency revises the baseline in light of the new information revealed in litigation. In this way, the underlying empirical realities can be continually revised to better balance the interests of both the merchant seller and the class of consumers in the particular market being regulated. The use of model terms and conditions as baselines for litigation is an interpretive strategy that easily can be adopted by interpretive bodies other than the CFPB, in particular the Federal Trade Commission, that can deploy their rule-making authority to develop the empirical foundation of the standards for efficient contracting in other multilateral markets with similar characteristics.¹⁰⁹

If updating is an essential element in revising inefficient standard terms, then it follows that nimble administrative agencies rather than legislative enactments are the mode of state intervention best able to solve the collective action problem in multilateral consumer markets. Indeed, Article 2 of the Uniform Commercial Code (U.C.C.) offers a cautionary lesson in how legislation can instantiate standardized default terms under circumstances in which subsequent revision is precluded.¹¹⁰ A drafter-supplied solution to a contracting problem that is efficient when initially supplied may subsequently become obsolete when the particular contracting problem requires a different solution. Article 2 took its current form in 1952 and, following the failure of a twenty-year effort to revise its obsolete terms in 2011, no further efforts to update its defaults are contemplated. Commercial behavior, however, is in important respects different from the

107. See *supra* note 5.

108. See SCOTT & KRAUS, *supra* note 5, at 507–08 (finding that the relatively few cases in which courts have struck down bargains as unconscionable require both procedural and substantive unconscionability).

109. For a similar suggestion using the Federal Trade Commission to provide the empirical basis for identifying fair terms in consumer contracts, see Ayers & Schwartz, *supra* note 94, at 552–54.

110. In previous work, I have criticized the public goods rationale for supplying private agents with contract terms because legislative drafters may lack the information to make efficient interventions. For discussion, see Alan Schwartz & Robert E. Scott, *The Common Law of Contracts and the Default Rule Project*, 102 VA. L. REV. 1523 (2016). The information problem arises whenever a standard common law default becomes obsolete and the drafters for the state consider replacing the default with a more current term.

behavior that was current seventy or more years ago. Consequently, many of the older default solutions in the U.C.C. are now obsolete.

The U.C.C. default terms governing sellers' warranties provide an instructive example. The U.C.C. primarily regulates quality issues with the implied warranty of merchantability: Goods must be "fit for the ordinary purposes for which they are used" and "pass without objection in the trade."¹¹¹ This standardized default was efficient when sellers traded homogenous standard goods to large numbers of similarly situated buyers. The warranty of merchantability is no longer efficient, however, because many sellers today trade heterogeneous—that is, customized—goods to buyers with particular needs. Consequently, sellers today commonly disclaim the implied warranty of merchantability.¹¹² The effect of the disclaimer is to shift some of the risk of quality defects to buyers, including consumer buyers. However, even though the U.C.C.'s solution no longer fits, parties still face quality issues and the need for a term to regulate them. And the same collective action problem that required state intervention in the first instance now precludes the parties in this multilateral market from designing an efficient solution. The lesson for state actors is that any failure to update a state-sanctioned default that was designed to replace an inefficient term in a standardized consumer contract inevitably creates a new contractual gap that will be filled with a new boilerplate term that is generated by the same market forces that the default was designed to correct.

V

CONCLUSION

Theory holds that parties pursue two separate economic objectives when contracting: First, they seek to design contractual incentives that motivate efficient ex ante investment in the contract and efficient trade ex post. Second, they seek to efficiently produce the contract terms that implement their design strategies. Because these goals are in tension, and because contracting occurs in markets with particular characteristics, parties inevitably trade off one objective against the other in very different ways. What I have called the paradox of contracting in markets is a way of illustrating the distinct trade-offs and the consequences that result from changes in the character of the market in which a contract is made. In bilateral markets, where parties cannot exploit the benefits of standardization, optimization leads to more efficient design at the cost of inefficient production. Here, parties optimize production costs by shifting costs between the front and back end of the contracting process depending on the levels of uncertainty they face. In contrast, contract terms are produced more

111. U.C.C. § 2-314(2).

112. In addition, parties routinely opt out of the Code's consequential damages default rule. In place of both the warranty and damages default term, parties create complex repair-and-replacement provisions that strive to allocate the risks of product defects in other ways. See Schwartz & Scott, *supra* note 18, at 1578.

efficiently in thick, multilateral markets, but at the cost of deficient design. The paradox derives from the inherent nature of standardization: production efficiency inevitably comes at the cost of individualized design.

The causal link between efficient production and deficient design would be manageable in contracting, as it is in other spheres of commercial life, but for the stranglehold on our imaginations created by the unitary conception of contract law. This paradigm impedes efforts to understand the singular challenges the state confronts in facilitating contracting in different market circumstances. In bilateral markets, the state can safely rely on courts to ensure that bargains are free and fair, presuming that with those conditions satisfied enforcement will correspond to the parties' *ex ante* intentions.¹¹³ Thick multilateral markets present a different problem for state regulation. In some multilateral markets where standardization results in terms that impair contractual incentives, the parties themselves have been able to organize a network to ameliorate the problems of deficient contract design. But in very large markets—webs without a spider—that coordination is very costly and may not be achieved solely through private efforts. Here, the state can serve as the partner in facilitating the coordination needed to mitigate latent risks. Theory tells us, then, that such a regulatory network is the most promising solution to the vexing problem of eliminating the inevitable problems of obsolescence and encrustation in consumer markets.

113. See generally Jody P. Kraus & Robert E. Scott, *The Case Against Equity in American Contract Law*, 93 S. CAL. L. REV. (forthcoming 2020) (Columbia Law & Econ. Working Paper Series No. 609, 2019).