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## A Theory of Self-Enforcing Indefinite Agreements

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## ARTICLES

A THEORY OF SELF-ENFORCING  
INDEFINITE AGREEMENTS*Robert E. Scott\**

*One of the core principles of contract law is the requirement of definiteness. Conventional wisdom holds, however, that the indefiniteness doctrine is largely ignored by courts. In this Article, Professor Scott examines the contemporary case law on indefinite contracts and his review yields three striking findings. First, there is a surprisingly high volume of litigation. Second, the indefiniteness doctrine lives on in the common law of contracts. Third, a large number of the indefiniteness cases involve contracts that are "deliberately" incomplete—that is, parties have declined to condition performance on available, verifiable measures that could be specified in the contract at relatively low cost. These findings raise a fundamental question: Why do parties write deliberately incomplete agreements in the shadow of a robust indefiniteness doctrine? One answer is that these agreements may be self-enforcing. But most of the recently litigated cases involve contracts that do not appear to be self-enforcing in the traditional sense. A second answer is indicated by recent work in experimental economics, which suggests that roughly half the population behave as if reciprocity were an important motivation, while the other half react as if motivated entirely by self-interest. This evidence of a taste for "reciprocal fairness" in nearly half the population, argues Professor Scott, may expand the domain of self-enforcing contracts beyond what is conventionally understood. It may also support a theory that predicts that deliberately incomplete contracts that rely on self-enforcement through reciprocal fairness between strangers are more efficient than the alternative of more complete, legally enforceable agreements.*

## INTRODUCTION

All contracts are incomplete. There are infinite states of the world and the capacities of contracting parties to condition their future performance on each possible state are finite.<sup>1</sup> But incomplete contracts dif-

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1. Both transaction costs, broadly defined, and information asymmetries are formidable barriers to writing complete contingent contracts. For discussion, see Robert

fer along key dimensions. Many contracts are incomplete because parties decline to condition performance on uncertain future states that they cannot observe or verify to courts.<sup>2</sup> In these cases, incompleteness is exogenous to the contract; that is, the parties are incapable of contracting efficiently over measures of performance that cannot be verified.<sup>3</sup> Other agreements, however, appear to be “deliberately” incomplete, in the sense that parties decline to condition performance on available, verifiable measures that could be specified in the contract at relatively low cost. Thus, incompleteness is endogenous to these agreements, suggesting that the parties had other reasons for leaving the terms in question unspecified.<sup>4</sup>

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E. Scott, *The Case for Formalism in Relational Contract*, 94 *Nw. U. L. Rev.* 847, 862–64 (2000).

2. The distinction between observable and verifiable information is analytically important in information economics, but both concepts remain somewhat imprecise. According to standard economic theory, a datum of information is “unobservable” if the other contracting party cannot perceive it. Buyers, for example, ordinarily cannot observe a seller’s production cost. A datum of information is “observable but not verifiable” if the other party can perceive it, but cannot prove the fact to a court or other third party at an acceptable cost. For example, an employer usually can know which employees sometimes shirk, but it would be expensive relative to the gains to prove to a court that a particular employee shirked 20% of the time. A datum of information thus is “verifiable” if a party both can observe it and prove its existence to a third party. Alan Schwartz & Robert E. Scott, *Contract Theory and the Limits of Contract Law*, 113 *Yale L.J.* (forthcoming Dec. 2003). Legal scholars understand, of course, that what can and cannot be proved to a court is often a function of factors other than the cost of producing evidence. See *infra* note 57.

3. Under modern law, open term or relational contracts (where incompleteness is a function of factors exogenous to the contract) are routinely enforced by courts. There is a rich literature analyzing the optimal contractual response to uncertainty and environmental complexity in these ongoing relationships. A number of scholars have argued that parties write such contracts when uncertainty makes it costly to negotiate fixed-performance terms or because open term contracts respond better to problems of moral hazard. See, e.g., Mark P. Gergen, *The Use of Open Terms in Contract*, 92 *Colum. L. Rev.* 997, 1007–09 (1992) (moral hazard concerns and alignment of individual and joint contract risks support use of open contract terms); Charles J. Goetz & Robert E. Scott, *Principles of Relational Contracts*, 67 *Va. L. Rev.* 1089, 1092 (1981) (complexity and uncertainty of future events motivate use of open contract terms); Victor P. Goldberg, *Price Adjustment in Long-Term Contracts*, 1985 *Wis. L. Rev.* 527, 531–33 (discussing utility of open contract terms in preserving joint profits); Victor P. Goldberg & John R. Erickson, *Quantity and Price Adjustment in Long-Term Contracts: A Case Study of Petroleum Coke*, 30 *J.L. & Econ.* 369, 370 (1987) (open contract terms reflect party comprehension problems and information generation costs); Paul L. Joskow, *Asset Specificity and the Structure of Vertical Relationships: Empirical Evidence*, 4 *J.L. Econ. & Org.* 95, 101 (1988) (explaining incomplete contracts in terms of asset specificity and uncertainty). All of these various explanations turn, at bottom, on the fact that the relevant measures of performance are too costly to specify or are not verifiable. In this Article, I put this category of contract aside and focus on agreements where the parties have declined to condition performance on verifiable measures that were available at low cost.

4. Among the reasons for leaving verifiable terms unspecified are high transaction costs, inadvertence, or, as I suggest in this paper, an intent to use self-enforcing mechanisms such as reciprocity. For discussion see George G. Triantis, *The Efficiency of*

These deliberately incomplete agreements are unenforceable under traditional contracts doctrine. One of the core principles of contract law is the requirement of definiteness. An agreement will not be enforced as a contract if it is uncertain and indefinite in its material terms.<sup>5</sup> A contract, that is, must be sufficiently complete such that a court is able to determine the fact of breach and provide an appropriate remedy. Only then does the doctrine direct courts to enforce the agreement by filling contractual gaps where necessary.<sup>6</sup> Otherwise, the doctrine directs courts to deny enforcement and leave the losses to lie where they fall.<sup>7</sup> It is widely believed, however, that the indefiniteness doctrine is largely ignored by contemporary courts. Conventional wisdom holds that courts should (and do) strive whenever possible to fill contractual gaps with general standards of reasonableness and good faith.<sup>8</sup>

But the conventional wisdom is misleading. A study of the contemporary case law on indefinite contracts, which I undertake here, reveals some striking facts. First, there is a surprisingly high volume of litigation. Second, despite the perceived influence of the Uniform Commercial Code and despite widespread academic support for more judicial gap-

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Vague Contract Terms: A Response to the Schwartz-Scott Theory of U.C.C. Article 2, 62 *La. L. Rev.* 1065, 1071–72 (2002). The argument advanced in this Article—that courts can (and do) make judgments about how aggressively to fill contractual gaps based on the reasons why the agreement is incomplete—is similar in some respects to the argument advanced by Eggleston, Posner, and Zeckhauser that courts should interpret simple contracts either strictly or liberally based on the reasons for contractual simplicity. See Karen Eggleston, Eric A. Posner & Richard Zeckhauser, *The Design and Interpretation of Contracts: Why Complexity Matters*, 95 *Nw. U. L. Rev.* 91, 126–32 (2000).

5. See, e.g., *Joseph Martin, Jr., Delicatessen, Inc. v. Schumacher*, 417 N.E.2d 541, 543 (N.Y. 1981); *Varney v. Ditmars*, 111 N.E. 822, 824 (N.Y. 1916); Restatement (Second) of Contracts § 33 (1981); Restatement of Contracts § 32 (1932); 1 Samuel Williston, *A Treatise on the Law of Contracts* §§ 37–49 (Walter H. E. Jaeger ed., 3d ed. 1957).

6. E.g., U.C.C. § 2-204(3) (2002); Restatement (Second) of Contracts, *supra* note 5, § 33(2). For a discussion of the differences between the common law and Uniform Commercial Code approaches to uncertainty, see *infra* notes 21–36 and accompanying text.

7. This general proposition is qualified to the extent that the agreement has been partially executed by the promisee. In that case, general principles of restitution may support a recovery on the basis of quantum meruit. See Restatement (Second) of Contracts, *supra* note 5, § 34(3) cmt. d. Moreover, a few courts have granted relief on the basis of promissory estoppel where the facts show a specific inducement by the promisor. See, e.g., *Wheeler v. White*, 398 S.W.2d 93, 97 (Tex. 1965).

8. See, e.g., 1 Arthur Corbin, *Corbin on Contracts* § 95, at 400 (1963) (“[T]he court should not frustrate [the parties’] intentions if it is possible to reach a fair and just result, even though this requires a choice among conflicting meanings and the filling of some gaps that the parties have left.”); see also Restatement (Second) of Contracts, *supra* note 5, § 33 cmt. a; cases cited *infra* note 36. In essence, the disagreement between the common law and contemporary approaches concerns which presumption should govern in cases of incompleteness. Everyone agrees that the evidence must support a finding that the promisor intended to be bound. The disagreement concerns just how proactive a court should be in supplying terms the absence of which would preclude giving a remedy. See *infra* text accompanying notes 30–33.

filling, the indefiniteness doctrine lives on in the common law of contracts. In literally dozens of cases, American courts dismiss claims for breach of contract on the grounds of indefiniteness, often without granting any relief to the disappointed promisee.<sup>9</sup>

This evidence raises a fundamental question: Why do parties write deliberately incomplete agreements in the shadow of a robust indefiniteness doctrine? One answer is that parties may simply be ignorant of the distinction between unenforceable incomplete agreements and enforceable open term contracts. Another answer is that these agreements may be self-enforcing. If the parties themselves can create efficient extralegal mechanisms for coping with problems of hidden action and hidden information, then they will be indifferent to legal enforcement. Scholars have long understood that reputation and the discipline of repeated interactions are efficient means of self-enforcement.<sup>10</sup> But these conditions for self-enforcement are stringent. Reputations work best in markets for homogeneous goods or in ethnically homogeneous communities,<sup>11</sup> and parties in ongoing relationships face end-game dilemmas.<sup>12</sup> Indeed, most of the recently litigated cases do not appear to be self-enforcing in the traditional sense. Rather, most are isolated transactions in heterogeneous markets between strangers trading at arm's length.<sup>13</sup>

Recent work in experimental economics suggests, however, that the domain of self-enforcing contracts may be considerably larger than has been conventionally understood. A robust result of these experiments is that a significant fraction of individuals behave as if reciprocity were an important motivation (even in isolated interactions with strangers), while a comparable fraction react as if motivated entirely by self-interest. The evidence that in any population roughly half behave fairly and half behave selfishly provides the foundation for a theory of fairness grounded in the human motivation to reciprocate.<sup>14</sup> Reciprocity requires no enforcement costs and also permits parties to contract over nonverifiable measures of performance. Thus, this theory predicts that self-enforcement of deliberately incomplete agreements between strangers is more

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9. See cases collected *infra* table 2. The frequency of dismissals on the grounds of indefiniteness is inconsistent with conventional assumptions, but the failure to grant relief in the face of claims of reliance is even more striking. See *infra* note 48.

10. See Benjamin Klein, *Why Hold-Ups Occur: The Self-Enforcing Range of Contractual Relationships*, 34 *Econ. Inquiry* 444, 449-50 (1996); Robert E. Scott, *Conflict and Cooperation in Long-Term Contracts*, 75 *Cal. L. Rev.* 2039-49 (1987) [hereinafter *Scott, Conflict and Cooperation*].

11. See Janet Landa, *A Theory of the Ethnically Homogenous Middleman Group: An Institutional Alternative to Contract Law*, 10 *J. Legal Stud.* 349, 359-61 (1981) (suggesting that ethnic characteristics are low cost screening devices).

12. For discussion, see *infra* text accompanying notes 16-18.

13. See *infra* note 88.

14. These experiments do not show that individuals have an intrinsic motivation to be fair. Rather they show that individuals engage in voluntary cooperation in contexts where pure self-interest would dictate noncooperative actions. The source of this behavior remains an open question. See *infra* text accompanying notes 104-112.

efficient than the alternative of more complete, legally enforceable contracts.

A theory of reciprocal fairness also provides a fresh explanation for the prevalence of informal agreements to agree despite judicial decisions denying enforcement of such agreements. These "comfort agreements" can be understood as a means of screening potential trading partners by which the parties gain valuable information about each other's preferences for reciprocity. In addition, the potency of reciprocal fairness as a method of self-enforcement explains (and justifies) the resilience of the common law indefiniteness doctrine in the face of a contemporary academic consensus favoring the expansion of legal liability. The experimental evidence suggests that transforming an informal, indefinite agreement into a legally binding obligation is often counterproductive; legal liability can increase moral hazard and it may also "crowd out" the parties' self-enforcing mechanisms.

In this Article I argue that the observed preference for reciprocal fairness offers the best available solution to the puzzle of deliberately incomplete agreements. Part I begins the analysis by evaluating the large and hitherto unexamined body of cases where courts decline to enforce agreements on the grounds of indefiniteness. In many of these cases the parties appear to discard verifiable information that they might have used to write more complete, legally enforceable contracts. Part II evaluates recent experimental evidence supporting a theory of reciprocal fairness, a theory that greatly expands the domain of self-enforcing agreements. Part III then turns to the central questions underlying the legal regulation of indefinite agreements: Why do parties write intentionally indefinite agreements? And can the courts' refusal to enforce these agreements be justified?

I conclude that the robust experimental evidence of self-enforcing reciprocity undermines the conventional assumption that both fairness and efficiency are best served by expanding the domain of contractual liability. The error in the conventional analysis has been the instinct to generalize from those instances where self-enforcement has broken down. But the occasional failure of self-enforcement provides little guidance for how the law should treat the far greater number of instances where reciprocity may well be the more efficient mechanism for making credible promises. Fairness theory better explains the behavior of contracting parties as well as the durability of the indefiniteness doctrine which, by narrowing the domain of legal liability, preserves space for parties to exploit opportunities to reciprocate.

## I. RETHINKING THE LAW OF INDEFINITE CONTRACTS

The first objective of contract law is to resolve a basic sorting problem. Our legal system does not enforce all promises, even those that were seriously intended. Thus, a normative theory of contract law must explain why certain bargained-for promises deserve a presumption of en-

forceability in the first place. One response is that the freedom to exchange entitlements presupposes the freedom to contract for such an exchange. Both freedoms are supported by norms of autonomy and efficiency. Parties who are denied either the freedom to contract or the freedom to exchange entitlements suffer unnecessary constraints on their choices, constraints that undermine the value of the entitlements themselves. Thus, the normative claim is that the law, by standing behind a present promise to exchange entitlements in the future, offers individuals more choices than they would otherwise enjoy and, other things being equal, more choice is better than less.<sup>15</sup>

But this argument assumes too much. It assumes, for example, that promises are not credible absent legal enforcement. Yet we know that contracts often are performed even in the absence of any legal sanctions for breach. Contracts may be "self-enforcing" in two senses.<sup>16</sup> First, where parties contemplate repeated interactions, neither party will breach an agreement if the expected gains from breaching are less than the expected returns from future transactions that breach would sacrifice. Second, neither party will breach if the reputational costs of a broken promise are greater than the gains from breaching. Both of these familiar mechanisms for self-enforcement suffer from significant constraints, however. Ongoing relationships inevitably come to an end and thus all repeated interactions are subject to a familiar end-game problem. Indeed, in the limiting case, the anticipation of the last transaction may cause the entire cooperative pattern to unravel.<sup>17</sup> Reputation, in turn, will only work to make promissory commitments credible if other contracting parties can conveniently learn about the reasons why any particular transaction broke down. Consequently, a reputation for trustworthiness is difficult to establish, especially in heterogeneous economies where most market participants are unfamiliar with any particular contracting party.<sup>18</sup> Thus, it is generally assumed that many (if not most) contracts fall outside the self-enforcing range.

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15. Robert E. Scott & William J. Stuntz, *Plea Bargaining as Contract*, 101 *Yale L.J.* 1909, 1913 (1992).

16. There is an extensive literature on self-enforcing contracts. See, e.g., Benjamin Klein & Keith B. Leffler, *The Role of Market Forces in Assuring Contractual Performance*, 89 *J. Pol. Econ.* 615, 617 (1981); L.G. Telser, *A Theory of Self-Enforcing Agreements*, 53 *J. Bus.* 27 (1980); Oliver E. Williamson, *Assessing Contract*, 1 *J.L. Econ. & Org.* 177, 201-02 (1985).

17. Scott, *Conflict and Cooperation*, *supra* note 10, at 2033.

18. Reputations are most effective as a means of self-enforcement in small, homogeneous communities, where contracting behavior soon becomes common knowledge, and sanctions against untrustworthy parties can effectively be imposed. See Avner Greif, *Informal Contract Enforcement: Lessons from Medieval Trade*, in 2 *The New Palgrave Dictionary of Economics and the Law* 287, 287-95 (Peter Newman ed., 1998) [hereinafter *New Palgrave Dictionary*] (detailing effect of cultural and social factors on self-enforcement); Landa, *supra* note 11, at 356 (explaining that members in kinship/ethnic groups have strong incentive to remain loyal to each other). Sanctions for bad behavior are also effective where industries establish trade associations that can both

To qualify the earlier argument, therefore, legal rules matter where reputation and repeat dealings do not or cannot restrain the incentive to breach. In such an environment, legal enforcement is necessary to make a promise to perform credible.<sup>19</sup> The decision to enforce a contract raises a set of subsidiary questions: What is the proper domain of freedom of contract? Within that domain, what is the proper role of the state in interpreting the meaning of incomplete contracts?<sup>20</sup> Much recent scholarship has focused on one or the other of these subsidiary questions, but too little attention has been directed to the initial sorting question and to understanding the line between informal, self-enforcing agreements and legally enforceable contracts. In this Article I begin the work of developing a theory of contract enforcement by examining the domain of self-enforcement and its relationship to legal enforcement.

### A. *Indefinite Agreements at Common Law*

One of the core principles of the common law of contracts is that the promises of parties to a legally enforceable contract must be certain and definite such that their intention may be ascertained with a reasonable degree of certainty. This principle was illustrated in the celebrated case of *Varney v. Ditmars*, where the New York Court of Appeals declined to enforce an agreement by an architect to give his draftsman “a fair share of [the] profits” in exchange for a greater effort on some pressing projects.<sup>21</sup> The court held that such an agreement was not only uncertain, but “is necessarily affected by so many other facts that are in them-

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identify bad behavior and impose appropriate sanctions, such as boycotts. The contracting behavior of the members of the association thus becomes part of the group's collective memory. See 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) (explaining National Grain and Feed Association's procedures for facilitating trade between members); Lisa Bernstein, *Private Commercial Law in the Cotton Industry: Creating Cooperation Through Rules, Norms, and Institutions*, 99 Mich. L. Rev. 1724, 1745–54 (2001) (detailing importance of reputation and nonlegal sanctions in cotton industry).

19. There are at least two paradigmatic cases where legal enforcement of promises is necessary in order to maximize social welfare: 1) in volatile markets where a party's failure to perform could threaten its partner's survival; and 2) where the contractual surplus would be maximized if one or both of the parties made relation-specific investments. In either case, absent legal enforcement, promises to perform would not be credible and parties would predictably decline to write the efficient contract. See Schwartz & Scott, *supra* note 2.

20. The freedom of contract question focuses on the set of mandatory rules that limits the enforcement of certain contracts on either substantive policy grounds or because of defects in the bargaining process. Enforcement of contracts within that domain then requires both a theory of interpretation that maps from the semantic content of the parties' writing to the writing's legal implications as well as a set of efficient default rules for those cases where contracting costs may have prevented the parties from solving their contracting problems themselves. For discussion, see Robert E. Scott, *The Rise and Fall of Article 2*, 62 La. L. Rev. 1009, 1016–22 (2002).

21. 111 N.E. 822, 823 (N.Y. 1916).



selves indefinite and uncertain that the intention of the parties is pure conjecture. . . . *Such an executory contract must rest for performance upon the honor and good faith of the parties making it.*"<sup>22</sup>

An earlier New York case, *Mackintosh v. Thompson*,<sup>23</sup> further illustrates the kind of agreement that was found unenforceable under the common law rule. In *Mackintosh*, the plaintiff sued to recover compensation in addition to a stated salary which had already been paid. He claimed that while he was employed by the defendants, he informed them that he intended to quit unless he was given an increase in salary. In response, one of the defendants told him that they would make it worth his while if he would stay on, promising to give him a share of the profits on certain buildings that they were then constructing. When the plaintiff asked what would be the amount of the bonus, he was told, "You can rely on me. I will see that it is all right."<sup>24</sup> The court held that the arrangement was too indefinite to form the basis of any obligation on the part of the defendant.<sup>25</sup>

This common law rule not only applied to cases such as *Varney* and *Mackintosh* where the contract terms themselves were vague, but also extended to agreements where essential terms were explicitly left to further negotiation. For example, in *Petze v. Morse Dry Dock & Repair Co.*, a New York appellate court held that an agreement providing that "the method of accounting to determine the net distributable profits is to be agreed upon later" was unenforceable under the indefiniteness rule.<sup>26</sup> Courts thereafter consistently held that such "agreements to agree" were unenforceable so long as any essential term was open to negotiation.<sup>27</sup>

Even at common law, however, the indefiniteness doctrine was subject to several qualifications. First, indefiniteness would not prevent a recovery in quantum meruit in the event one party to an informal agreement performed in reasonable reliance on its terms, even though they were vague, indefinite, and uncertain.<sup>28</sup> Second, the question of whether the promise of a "fair" share of the profits or a "reasonable" compensation was too indefinite depended on the subject matter of the agreement. In sales of goods, for example, common law courts held that the words "fair and reasonable value" were a synonym for "market value" and thus a definite promise to pay the fair market value of goods was inferred from the express agreement of the parties.<sup>29</sup> Indeed, the common law courts

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22. *Id.* at 824 (emphasis added).

23. 68 N.Y.S. 492 (App. Div. 1901).

24. *Id.* at 494.

25. *Id.*

26. 109 N.Y.S. 328, 329 (App. Div. 1908).

27. See Robert E. Scott & Jody S. Kraus, *Contract Law and Theory* 34–44, 322–25 (3d ed. 2002).

28. See, e.g., *Bragdon v. Shapiro*, 77 A.2d 598, 601 (Me. 1951) ("It is not necessary that [plaintiff] lose the fair value of his services by reason of an illusory contract for a bonus."); E. Allan Farnsworth, *Contracts* § 3.30 (3d ed. 1999).

29. *Varney v. Ditmars*, 111 N.E. 822, 824 (N.Y. 1916).

went farther in the case of sales contracts, holding that even where a fixed price or other consideration was not specified in the agreement, it was presumed that a reasonable price was intended. Common law courts showed no reluctance, therefore, in filling such gaps in sales contracts on the view that “[s]uch contracts are common, and when there is nothing therein to limit or prevent an implication as to the price they are, so far as the terms of the contract are concerned, binding obligations.”<sup>30</sup>

The rationale of the common law indefiniteness doctrine, then, was grounded in the presumed intentions of the parties. But where the parties did not make their intentions clear, the common law rule presumed that the failure to reach agreement on material terms, where no terms could be objectively supplied, implied an intention not to be legally bound. Thus, under the common law rule the question of intent was addressed indirectly, by looking at the extent to which material terms were left unspecified by the parties. If the court found that the terms were sufficiently complete and definite, it would infer from that fact the intent to contract; if not, the court would infer that the parties did not intend to be bound.

#### *B. The Modern View on Indefiniteness and Open Terms*

The drafters of the Uniform Commercial Code followed the line of cases holding that price terms in sales contracts could be supplied from evidence of market prices. Thus, U.C.C. § 2-305 provides that parties can conclude a sales contract even though the price is not specified or they agree to agree on a price and are subsequently unable to agree.<sup>31</sup> But the Code goes beyond the common law in explicitly authorizing an expansive role for courts in filling open terms in otherwise incomplete agreements.<sup>32</sup> As I noted above, the justification for the common law rule was that it honored the intent of the parties. That is also the justification for U.C.C. § 2-204: It honors the parties’ intent to be bound. The difference, then, is not the purpose of the rule but the presumption that follows from agreements with open or indefinite terms. The U.C.C. shifts from the bright-line rule of the common law to a broad standard. Under

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30. *Id.*

31. U.C.C. § 2-305 (2002) states:

The parties if they so intend can conclude a contract for sale even though the price is not settled. In such a case the price is a reasonable price . . . if (a) nothing is said as to price; or (b) the price is left to be agreed by the parties and they fail to agree. . . .

32. U.C.C. § 2-204 provides that “[e]ven though one or more terms are left open a contract for sale does not fail for indefiniteness if the parties have intended to make a contract and there is a reasonably certain basis for giving an appropriate remedy.” The Official Comment to this provision provides that “the fact that one or more terms are left to be agreed upon [is not] enough of itself to defeat an otherwise adequate agreement. Rather commercial standards . . . are intended to be applied, this Act making provision elsewhere for missing terms needed for performance, open price, remedies and the like.” § 2-204 cmt.

the U.C.C. standard, a court is asked to focus on the underlying question of intent directly, and is encouraged to infer that intent despite the existence of open or indefinite terms. That, of course, is just what many courts have done.<sup>33</sup>

The standard-based approach of the U.C.C., now followed as well by the *Restatement*,<sup>34</sup> is justified primarily by the defects of the common law bright-line rule. In many contracting contexts a rule that determines intent by focusing on missing terms is seriously overinclusive. All contracts are incomplete; therefore, the fact of incompleteness does not by itself imply an intention to avoid legal enforcement. Incompleteness may be caused by many factors, including the desire for flexibility and the unwillingness of parties to condition future performance on nonobservable or nonverifiable measures of performance. Thus, an intention to be bound to terms reasonably supplied by courts may often be the best inference to be drawn from relational contracts that are incomplete owing to such exogenous factors.<sup>35</sup>

But, at least implicitly, the modern approach goes even farther, shifting the presumption toward enforcement whenever terms are left open or are indefinite. Professor Corbin perhaps best expressed this view:

In considering expressions of agreement, the court must not hold the parties to some impossible, or ideal, or unusual standard. It must take language as it is and people as they are. All agreements have some degree of indefiniteness and some degree of uncertainty.

. . . .

If the parties have concluded a transaction in which it appears that they intend to make a contract, the court should not frustrate their intention if it is possible to reach a fair and just result, even though this requires a choice among conflicting meanings and the filling of some gaps that the parties have left.

The fact that the parties have left some matters to be determined in the future should not prevent enforcement, if some method of determination independent of a party's mere "wish, will, and desire" exists, either by virtue of the agreement itself or by commercial practice or other usage or custom.<sup>36</sup>

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33. See Scott & Kraus, *supra* note 27, at 315-22.

34. *Restatement (Second) of Contracts*, *supra* note 5, § 33.

35. See *supra* note 3. To be sure, an intention to be legally bound is not the only inference to be drawn from exogenous incompleteness. Another possibility is that the parties intend to renegotiate *ex post* once the uncertainty is removed.

36. 1 Corbin, *supra* note 8, § 95, at 396, 400-01; see also *Restatement (Second) of Contracts*, *supra* note 5, § 33 cmt. a ("[T]he actions of the parties may show conclusively that they have intended to conclude a binding agreement, even though one or more terms are missing or are left to be agreed upon. In such cases courts endeavor, if possible, to attach a sufficiently definite meaning to the bargain."). Justice Cardozo put the contemporary presumption in favor of enforcement this way: "Indefiniteness must reach the point where construction becomes futile." *Heyman Cohen & Sons v. M. Lurie Woolen Co.*, 133 N.E. 370, 371 (N.Y. 1921); see also *Denver D. Darling, Inc. v. Controlled Env'ts*

The contemporary presumption toward filling gaps in incomplete contracts has led commentators to assume that the common law indefiniteness doctrine is no longer a serious impediment to legal enforcement.<sup>37</sup> But, surprisingly, the nearly universal acceptance of the judicial practice of supplying open terms for relational contracts has not slowed the pace of litigation over indefinite agreements. Moreover, even when these agreements are assessed under the contemporary standard, many fail to pass muster. In recent years, courts have invoked the indefiniteness doctrine to refuse enforcement of promises to pay "costs and expenses for sumptuous living and maintenance,"<sup>38</sup> to forgo collection "as long as [debtor] make[s] progress toward profitability,"<sup>39</sup> to "provide future financing,"<sup>40</sup> to send a seller "some work,"<sup>41</sup> and to provide "loan supervision information."<sup>42</sup>

In sum, the law of indefiniteness is not a story of a traditional common law rule for limiting legal liability being inexorably overturned by a contemporary preference for filling gaps with broad standards of good faith, reasonableness, and the like. Evidence that courts continue to sort agreements that lack material terms on the basis of the indefiniteness doctrine may reflect a further example of the tension between common law formalism and Code contextualism, a tension that is clearly evident, for example, in widely disparate theories of contractual interpretation.<sup>43</sup> But if the disparate results in indefiniteness cases reflect more than simply this tension, it is important to identify the factors that determine

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Constr., Inc., 108 Cal. Rptr. 2d 213, 223–24 (Ct. App. 2001) (citing Corbin); *Bethlehem Steel Corp. v. Litton Indus., Inc.*, 468 A.2d 748, 766–67 (Pa. Super. Ct. 1983) (describing intent of U.C.C. to preserve contracts and fill in gaps), *aff'd*, 488 A.2d 581 (Pa. 1985); *Novelly Oil Co. v. Mathy Constr. Co.*, 433 N.W.2d 628, 629 (Wis. Ct. App. 1988) (describing "liberalty" of indefiniteness principle).

37. For example, John Calamari and Joseph Perillo have described contemporary judicial practice as follows:

[U]nder the traditional rule where the parties have purported to agree on a material term and left it indefinite, the agreement is too vague and indefinite. If, however, the parties are merely silent as to material term [sic] or discuss the term but do not purport to agree on it and do not condition their agreement on an agreement as to this term, there is a strong possibility that a term may be implied from surrounding circumstances or supplied by a court using a gap-filler.

John D. Calamari & Joseph M. Perillo, *The Law of Contracts* 51–55 (4th ed. 1998); see also Gergen, *supra* note 3, at 1062 (providing arguments against "the now (happily) discredited doctrine that courts ought not enforce indefinite contracts").

38. *Trimmer v. Van Bomel*, 434 N.Y.S.2d 82, 86 (Sup. Ct. 1980).

39. *Champaign Nat'l Bank v. Landers Seed Co.*, 519 N.E.2d 957, 960 (Ill. App. Ct. 1988).

40. *Union State Bank v. Woell*, 434 N.W.2d 712, 717 (N.D. 1989).

41. *Roy v. Danis*, 553 A.2d 663, 664 (Me. 1989).

42. *Univ. Nat'l Bank v. Ernst & Whinney*, 773 S.W.2d 707, 710 (Tex. App. 1989).

43. See, for example, the current split between courts that apply a "hard" parol evidence rule and a strong plain meaning rule and courts following the "soft" parol evidence and contextual meaning rules of the U.C.C. Eric A. Posner, *The Parol Evidence Rule, the Plain Meaning Rule, and the Principles of Contractual Interpretation*, 146 U. Pa. L. Rev. 533, 534 (1998).

when a contract is likely to be held unenforceable owing to indefiniteness, and how these agreements differ from those where courts routinely fill gaps with open terms. These questions cannot be answered so long as the patterns of contemporary indefiniteness litigation are examined casually and unsystematically. In the following discussion, therefore, I report the results of a systematic examination of the indefiniteness case law and undertake a functional analysis of how courts do, in fact, sort between enforceable and unenforceable agreements.

### C. *What Do Courts Actually Do?*

In order to create a database for evaluating the enforcement decisions of contemporary American courts, I began with a sample of all litigated cases between 1998 and 2002. A search for contracts cases of the past five years that invoke certainty as to subject matter returned 238 decisions.<sup>44</sup> A detailed examination of 137 cases randomly selected from the base pool revealed forty-eight cases where the issue of indefiniteness was only peripherally relevant to the outcome.<sup>45</sup> In many of these cases, the issue was raised in the context of preliminary negotiations where the defendant claimed that the representation relied on by the plaintiff was insufficiently definite to be characterized as an offer or an acceptance. In these instances, therefore, the underlying question was whether the parties had reached an agreement at all, rather than the further question: Assuming the parties have concluded an agreement, is that agreement legally enforceable as a contract?<sup>46</sup>

The remaining eighty-nine cases directly raise the issue of enforcement.<sup>47</sup> In thirty-four cases the court enforced the contract despite the defendant's claim that the agreement was indefinite. In the remaining

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44. I searched Westlaw's 95k9(1) database—Contracts: Requisites and Validity: Nature and Essentials in General: Certainty as to Subject-Matter: In General—restricting it to all state and federal cases in the last five years. I conducted the search in January 2003.

45. The random selection process proceeded in two stages. I first selected one of every four cases in the base pool for a sample of sixty cases. Subsequently, I expanded the sample by selecting every other case from the remaining 178 cases, yielding a total sample of 149 cases. I then discarded twelve cases where indefiniteness or certainty was not discussed in the body of the opinion, leaving a sample of 137 cases.

46. The issue of precontractual liability raises interesting but quite different questions from those discussed in this paper. For this reason, I leave aside the issues of precontractual reliance and the related question of when, if ever, liability should attach *prior* to the conclusion of an agreement (albeit an indefinite one). For the best doctrinal analysis of this question, see E. Allan Farnsworth, *Precontractual Liability and Preliminary Agreements: Fair Dealing and Failed Negotiations*, 87 Colum. L. Rev. 217 (1987). For recent law and economic analyses, see Richard Craswell, *Offer, Acceptance, and Efficient Reliance*, 48 Stan. L. Rev. 481 (1996); Jason Scott Johnston, *Communication and Courtship: Cheap Talk Economics and the Law of Contract Formation*, 85 Va. L. Rev. 385 (1999); Avery Katz, *When Should an Offer Stick? The Economics of Promissory Estoppel in Preliminary Negotiations*, 105 Yale L.J. 1249 (1996).

47. The cases are coded and tabulated *infra* tables 1 & 2.

fifty-five cases the court denied enforcement, despite finding that the parties had concluded an agreement, on the grounds that the agreement was too indefinite and uncertain and thus was legally unenforceable as a contract.<sup>48</sup> One hypothesis that might explain the different results is that those courts enforcing allegedly indefinite agreements are following the trend of the U.C.C. and the *Second Restatement*, while the larger number of courts that deny enforcement are adhering to the traditional common law view.<sup>49</sup> This hypothesis implies 1) that the cases granting enforcement would include a larger number of Code cases, and 2) that non-Code cases would divide between states following the traditional view and those adopting the modern approach to open terms.

Neither of these empirical conditions is confirmed by the data. First, only one of the cases granting enforcement involved the sale of goods under the U.C.C.<sup>50</sup> Indeed, in only three instances did a court cite with

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48. It is equally noteworthy that, of the fifty-five cases denying enforcement on the grounds of uncertainty, only two authorized restitutionary relief for the plaintiff. See *Bergman v. Delulio*, 826 So. 2d 500, 503 (Fla. Dist. Ct. App. 2002) (holding that plaintiff had viable quantum meruit claim against defendant but could not recover damages on his claim); *Allied Erecting & Dismantling Co. v. Uneco Realty Co.*, 765 N.E.2d 420, 425–26 (Ohio Ct. App. 2001) (holding that plaintiff had viable quantum meruit claim). The conventional view is that a promisee can recover in restitution for partial performance of an indefinite agreement. Thus, for example, courts have permitted an employee to recover in quantum meruit for the value of extra efforts induced by his employer's promise to share the resulting profits. See, e.g., *Bragdon v. Shapiro*, 77 A.2d 598, 602 (Me. 1951); *Farnsworth*, supra note 28, § 3.30 (“[I]f an employer's promise to pay an employee a share of the profits in addition to a wage is unenforceable for indefiniteness, the employee may have restitution of the reasonable value of any services performed in excess of the wages paid.”). But where both the promise to perform additional work as well as the promise to provide a “bonus” are indefinite, the cases from the sample deny relief altogether. See, e.g., *Chirichillo v. Prasser*, 30 F. Supp. 2d 1132, 1140 (E.D. Wis. 1998) (holding there was no evidence parties even struck a bargain as plaintiff “asked for nothing” and defendant “offered nothing in return”); *Burns v. Dees*, 557 S.E.2d 32, 38 (Ga. Ct. App. 2001) (concluding that agreement is invalid because defendant did not promise to provide plaintiff with definite share of profits in return for plaintiff providing certain services); *Mooney v. Mooney*, 538 S.E.2d 864, 867 (Ga. Ct. App. 2000) (holding contract unenforceable because parties never discussed particulars of defendant's promise to help care for grandchild); *Smith v. Hammons*, 63 S.W.3d 320, 325–26 (Mo. Ct. App. 2002) (sustaining summary judgment in favor of defendant where parties did not agree on essential terms of contract, such as plaintiff's share of profits, and plaintiff's promise to perform additional work was absent altogether); *Cheloha v. Cheloha*, 582 N.W.2d 291, 297–98 (Neb. 1998) (holding purported contract unenforceable because indefinite as to material terms); see also cases cited infra table 2.

49. See Nellie Eunsoo Choi, Note, *Contracts with Open or Missing Terms Under the Uniform Commercial Code and the Common Law: A Proposal for Unification*, 103 *Colum. L. Rev.* 50, 52–53 (2003) (framing divergent results in cases as jurisdictional divide in which “[s]ome jurisdictions apply the traditional common-law doctrine and hold service contracts with open or missing terms invalid for indefiniteness, while others apply the modern U.C.C. approach to hold the contracts valid” (footnote omitted)).

50. See *Am. Laminates, Inc. v. J.S. Latta Co.*, 980 S.W.2d 12 (Mo. Ct. App. 1998).

approval the Code approach to open terms,<sup>51</sup> and the *Second Restatement* view was the basis for decision in just four others.<sup>52</sup> Moreover, the division between enforcement and nonenforcement is not correlated with whether or not the state has a traditional or modern approach to contractual liability. In two states, California and Pennsylvania, the courts acknowledged a presumption favoring enforcement and filling gaps whenever possible.<sup>53</sup> But notwithstanding the presumption, courts in those states divided on the question of whether the agreement at issue was enforceable.<sup>54</sup> In the remaining thirty-one jurisdictions, the courts at least formally applied the traditional indefiniteness doctrine, yet the cases divided roughly two to one between nonenforcement and enforcement. In eight states—Connecticut, Maryland, New York, Illinois, Ohio, Georgia, Tennessee, and Texas—appellate courts reached different enforcement decisions on different facts.<sup>55</sup> Taken as a whole, therefore, the data tend to refute the conventional academic wisdom that the legal standard *by itself* influences the enforcement choice.<sup>56</sup>

Rather, the cases drawn from the sample show that courts generally focus on whether the parties have fully exploited verifiable information in concluding their agreements.<sup>57</sup> Where the contract is incomplete owing

51. See *ATACS Corp. v. Trans World Communications, Inc.*, 155 F.3d 659, 666–67 (3d Cir. 1998) (citing U.C.C. § 2-311(1) (2002)); *Willow Funding Co. v. Grencom Assocs.*, 779 A.2d 174, 182 (Conn. App. Ct. 2001) (citing Connecticut codification of U.C.C. § 2-204); *Am. Laminates, Inc.*, 980 S.W.2d at 22–23 (citing Missouri codification of U.C.C. § 2-204(3)). One possible explanation for the absence of Code cases in the sample is that the Code rule on open terms, especially price terms, is sufficiently clear and well established that parties decline to litigate “settled” law.

52. See *Gonzalez v. Don King Prods., Inc.*, 17 F. Supp. 2d 313, 315 n.1 (S.D.N.Y. 1998) (citing Restatement (Second) of Contracts, *supra* note 5, § 204); *Gallagher, Langlas & Gallagher v. Burco*, 587 N.W.2d 615, 617 (Iowa Ct. App. 1998) (citing Restatement (Second) of Contracts, *supra* note 5, § 33); *Kostelnik v. Helper*, 770 N.E.2d 58, 63 (Ohio 2002) (citing Restatement (Second) of Contracts, *supra* note 5, § 34(2)); *Davidson v. Holtzman*, 47 S.W.3d 445, 454 (Tenn. Ct. App. 2000) (citing Restatement (Second) of Contracts, *supra* note 5, § 33).

53. *ATACS Corp.*, 155 F.3d at 666–67; *Krantz v. BT Visual Images, L.L.C.*, 107 Cal. Rptr. 2d 209, 217–18 (Ct. App. 2001).

54. Compare *ATACS Corp.*, 155 F.3d at 668, and *Denver D. Darling, Inc. v. Controlled Env'ts Constr., Inc.*, 108 Cal. Rptr. 2d 213, 224 (Ct. App. 2001), with *Aircraft Guar. Corp. v. Strato-Lift, Inc.*, 103 F. Supp. 2d 830, 836–37 (E.D. Pa. 2000), and *Halvorsen v. Aramark Unif. Servs., Inc.*, 77 Cal. Rptr. 2d 383, 386 (Ct. App. 1998).

55. New York is perhaps the most influential state in the sample. Thirteen indefiniteness cases came out of New York courts. Enforcement was denied in ten instances and granted in three.

56. Cf. Choi, *supra* note 49, at 52–53.

57. In coding the nature of the information available to the parties to these agreements, I use a richer conception of verifiability than is common to formal contract theory. I define a measure of performance as verifiable if competent legal counsel is prepared to opine, *ex ante*, that the failure of the other party to perform can be demonstrated to a court with a substantial probability of success. Relevant to this prediction is not only the cost of producing evidence but also the relationship between the legal standard of proof and the management of evidence, and the relative complexity and

to uncertain future states that are not observable or not verifiable, the courts will typically enforce the contract by filling the resulting gaps. In that sense, the disputed performance cannot be contracted for and the incompleteness is thus exogenous to the contract. But if the parties appear to have discarded verifiable information that they might have used at relatively low cost to condition performance, the courts decline to enforce the agreement. Here the failure to use available measures of performance suggests either that the parties' action was the result of inadvertence or that the agreement was *deliberately* indefinite.

1. *Legally Enforceable Incompleteness*. — In thirty-four of the sample cases, the courts enforced contracts notwithstanding the claim of indefiniteness.<sup>58</sup> The enforceable agreements ranged across a variety of contexts from business development and marketing<sup>59</sup> to investment contracts,<sup>60</sup> and from distributorship agreements<sup>61</sup> to joint ventures.<sup>62</sup> In each of these contexts, the parties faced the canonical "contracting problem" of ensuring both efficient *ex ante* investment and efficient *ex post* trade in the subject matter of the contract.<sup>63</sup> In each case, however, the parties negotiated over complex transactions and were forced to cope with problems of hidden action and hidden information. Thus, high transaction costs as well as problems of asymmetric information<sup>64</sup> would

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interdependence of the measures of performance in the contract. This definition of verifiability raises a further complication that I sidestep in this paper. This paper, and most economic theory, treat verifiability as an exogenous variable. But, in fact, whether a measure of performance is verifiable or not is subject to some party control. Thus, the motivation for a particular contract term may be the ability of the moving party to manipulate the proof necessary to establish the fact in question. See, e.g., Franklin Allen & Douglas Gale, *Measurement Distortion and Missing Contingencies in Optimal Contracts*, 2 *Econ. Theory* 1, 5 (1992) (discussing assumed ability of supplier to distort contingent measurement system, while pointing out potential costs to that supplier of doing so). For a discussion of the relationship between optimal contract design and the strategic management of evidence, see Chris Sanchirico & George Triantis, *Evidence Arbitrage: The Fabrication of Evidence and the Verifiability of Contract Performance* (Univ. of Va. Sch. of Law, Law and Econ. Research Paper No. 02-17, Dec. 2002), available at [http://papers.ssrn.com/paper.taf?abstract\\_id=353243](http://papers.ssrn.com/paper.taf?abstract_id=353243) (on file with the *Columbia Law Review*).

58. See *infra* table 1.

59. *Quadron Software Int'l Corp. v. Plotseneder*, 568 S.E.2d 178, 180-81 (Ga. Ct. App. 2002).

60. *Giannaris v. Cheng*, 219 F. Supp. 2d 687, 690-91 (D. Md. 2002).

61. *Krantz v. BT Visual Images, L.L.C.*, 107 Cal. Rptr. 2d 209, 218 (Ct. App. 2001).

62. *DeBoer Structures (U.S.A.) Inc. v. Shaffer Tent & Awning Co.*, 233 F. Supp. 2d 934, 949 (S.D. Ohio 2002).

63. Contracting parties invest efficiently when they take actions that maximize the expected surplus from their contract. Contractors trade efficiently when, and only when, the value of the exchanged performance to the buyer is greater than the cost of performance to the seller. Schwartz & Scott, *supra* note 2.

64. Asymmetric information results from private facts that either cannot be observed by the other party or cannot be verified to a third party. See Alan Schwartz, *Incomplete Contracts*, in 2 *New Palgrave Dictionary*, *supra* note 18, at 277, 280-82 (1998) (describing problems of contracting under conditions of asymmetric information); see also Ian Ayres & Robert Gertner, *Strategic Contractual Inefficiency and the Optimal Choice of Legal*



likely have prevented the parties to these contracts from writing complete, first-best efficient contracts. When these conditions prevent parties from creating a term, the resulting contract is incomplete but may nevertheless be second-best efficient.

To understand the reasoning that underlies this conclusion, consider a salient example, *Krantz v. BT Visual Images, L.L.C.*<sup>65</sup> In *Krantz*, plaintiff and defendant were in the business of marketing telecommunications systems. Plaintiff alleged the following facts: He and defendant entered into a "reseller agreement" by which defendant appointed plaintiff its distributor for San Francisco and Marin County with the right to sell its video conferencing equipment and other products. Thereafter, plaintiff and defendant signed a "teaming agreement" in which they agreed to submit a joint bid for Kaiser Permanente's video conferencing business both within and outside the Bay Area. To enhance the chances of getting the contract with Kaiser, plaintiff agreed to reduce his commission on the sale of defendant's products.<sup>66</sup> In exchange, the parties agreed that, if their joint bid was successful, plaintiff would receive an increased profit margin on future business from Kaiser and the parties would share jointly in all subsequent business with Kaiser.<sup>67</sup> Defendant ignored the teaming agreement and submitted its bid to Kaiser independently. Plaintiff sued for breach of contract and sought an accounting and recovery of lost profits. The trial court granted defendant's motion for summary judgment on the grounds of indefiniteness. The California Court of Appeals reversed, holding that, while one "might agree the unstated future margins and price terms are indefinite, *they were necessarily so*: it remained to be seen whether the joint proposal would be accepted."<sup>68</sup>

The court in *Krantz* identified the key variable that triggers a judicial decision to enforce: The parties wrote as complete an agreement as they could under the circumstances.<sup>69</sup> The information that they discarded involved the relationship between the plaintiff's efforts in servicing Kaiser under the contract and the defendant's investment in customized components suitable for Kaiser. The interaction between these inputs was complex. Both of these interactive inputs were essential ingredients to the

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Rules, 101 Yale L.J. 729 (1992) (same). For formal analyses of the effects of asymmetric information on incomplete contracting, see B. Douglas Bernheim & Michael D. Whinston, Incomplete Contracts and Strategic Ambiguity, 88 Am. Econ. Rev. 902 (1998); Benjamin E. Hermalin & Michael L. Katz, Judicial Modification of Contracts Between Sophisticated Parties: A More Complete View of Incomplete Contracts and Their Breach, 9 J.L. Econ. & Org. 230, 245-48 (1993); Jonathan Thomas & Tim Worrall, Income Fluctuation and Asymmetric Information: An Example of a Repeated Principal-Agent Problem, 51 J. Econ. Theory 367, 367-70 (1990).

65. 107 Cal. Rptr. 2d at 209.

66. *Id.* at 211-13.

67. Specifically, the parties agreed to negotiate precise profit margins and product pricing once the bid was accepted. *Id.* at 218.

68. *Id.* (emphasis added).

69. *Id.*

price of the product to Kaiser and to the resulting profits available for division. Thus, the complexity of the relationship would have increased the transaction costs of specifying profit margins more concretely. Moreover, neither the plaintiff's marketing efforts nor the quality of the defendant's specialized investment could be verified to a court. Selecting a contract term that conditions performance on unverifiable information would have been a poor choice because it would have created moral hazard. When a party cannot observe or verify the value of a relevant economic parameter, such as effort or quality, that party will reject a contract that conditions on that parameter because of the risk that the other party will behave strategically.<sup>70</sup> Where the incompleteness is predominantly a function of environmental complexity or of informational asymmetries, the data show that courts regard the resulting contract as "obligationally complete" and thus legally enforceable.<sup>71</sup>

2. *Unenforceable Indefinite Agreements.* — By contrast with *Krantz*, in fifty-five of the sample cases appellate courts refused to enforce the parties' agreement on the grounds of indefiniteness.<sup>72</sup> In a handful of cases, the indefiniteness seemed clearly to be the product of inadvertence or carelessness on the part of the parties (or their lawyers) in writing the contract.<sup>73</sup> But the bulk of the cases where courts denied enforcement to indefinite agreements cannot be understood in terms of careless omissions or an inadvertent failure to negotiate over conditions of performance that were otherwise verifiable. Rather, the facts support the hypothesis that the parties intentionally and deliberately concluded agreements that were indefinite as to key terms and that later resulted in litigation. Moreover, unlike the cases of exogenous incompleteness, in these instances the parties failed to incorporate in their agreements readily available, verifiable measures of performance. In sum, the parties to these agreements appear to have preferred the indefinite agreement they concluded to the more explicit and verifiable alternative that they ignored.

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70. Parties will write a more complete contract covering a specialized investment (such as the efforts of the plaintiff or the output of the defendant) when (i) they can specify clearly what standards the investment is to meet; (ii) the investment will meet those standards if undertaken correctly; and (iii) a party can prove to a court that the product of the investment did or did not satisfy the contractual standards. Schwartz & Scott, *supra* note 2. *Krantz* shows that these conditions are sometimes hard to meet. Contracts that compensate a seller on the basis of the quality of the end-product or an agent on the basis of the value of her efforts can create efficient incentives only when quality or effort is verifiable. *Id.*

71. Ayres & Gertner, *supra* note 64, at 731.

72. See *infra* table 2.

73. See *Don Webster Co. v. Indian W. Express, Inc.*, 161 F. Supp. 2d 959 (S.D. Ind. 2001); *Zurich Am. Ins. Co. v. Gen. Car & Truck Leasing Sys., Inc.*, 574 S.E.2d 914 (Ga. Ct. App. 2002); *Bulloch S., Inc. v. Gosai*, 550 S.E.2d 750 (Ga. Ct. App. 2001); *Strauss Paper Co. v. RSA Executive Search, Inc.*, 688 N.Y.S.2d 641 (App. Div. 1999); *Kostelnik v. Helper*, 770 N.E.2d 58 (Ohio 2002).

Although there are some variations in the cases, two common factual patterns predominate. The first, illustrated by *Smith v. Hammons*,<sup>74</sup> is the "indefinite bonus contract."<sup>75</sup> Smith entered into an agreement with Hammons Entertainment to produce and perform in a magic show. The parties agreed that Smith would be paid a stipulated yearly salary of \$150,000 in return for using his creative efforts to "[d]esign, stage, direct, perform and star in [a] magic and music show."<sup>76</sup> In addition, the agreement specified that if Smith faithfully performed his obligations, Hammons would subsequently pay Smith a signing bonus as well as a share of the profits from the show. Subsequently, Hammons became disappointed with Smith's efforts and fired him. Smith sued for his share of the bonus and lost profits. The court affirmed a summary judgment for Hammons, holding the bonus agreement too indefinite and thus unenforceable.<sup>77</sup>

The second archetype is a variation on the same theme. Here, the parties enter into what is traditionally designated an "agreement to agree" and what we might term a "comfort agreement."<sup>78</sup> As an example, in *Hunt v. Coker* the parties entered into a written agreement expressing their joint desire for Coker to sell, and Hunt to buy, Coker's insurance agency.<sup>79</sup> The document provided for a purchase date and set out several options for the purchase price, including 45% of the commissions that renew over five years, or 40% of the commissions that renew over six years, or 35% that renew over seven years.<sup>80</sup> The agreement provided that Hunt would consolidate his location with Coker as soon as possible, with each party paying his own expenses until the sale date. Subsequently, Coker became unhappy with Hunt's work and informed him that the offer of sale would not be honored. Hunt sued for breach.<sup>81</sup> The appellate court affirmed the decision of the trial court dismissing the

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74. 63 S.W.3d 320 (Mo. Ct. App. 2002).

75. Eighteen cases in the sample are coded as "indefinite bonus contracts." See *infra* table 2.

76. *Hammons*, 63 S.W.3d at 322.

77. *Id.* at 326.

78. The informal agreements to agree that I have designated "comfort agreements" are a subset of the larger category of agreements to agree that include, among others, formal letters of intent. The analogy is to "comfort letters" that are typically issued by a parent company to a lending institution and are aimed at encouraging the lender to issue credit to a subsidiary. The letter seeks to assure the lender without the parent committing itself as a surety or a guarantor. For further discussion, see Larry A. DiMatteo & René Sacasas, *Credit and Value Comfort Instruments: Crossing the Line from Assurance to Legally Significant Reliance and Toward a Theory of Enforceability*, 47 *Baylor L. Rev.* 357 (1995); René Sacasas & Don Wiesner, *Comfort Letters: The Legal and Business Implications*, 104 *Banking L.J.* 313 (1987). Eleven of the sample cases are coded as "comfort agreements," while four others involved more formal letters of intent. See *infra* table 2.

79. 741 So. 2d 1011, 1013 (Miss. Ct. App. 1999).

80. *Id.*

81. *Id.*

suit on the grounds of indefiniteness. The purchase “options” were not true options, the court held, since the parties never agreed that Hunt should have the right to choose among the designated alternatives and thus the parties never agreed on a stipulated price. Rather, the court found the agreement akin to an agreement to agree and thus unenforceable.<sup>82</sup>

In the cases falling within each of these prototypes, the courts appear most influenced by the failure of the parties to agree on readily available, verifiable terms. A stipulated bonus for achieving specific performance standards could easily have been negotiated in *Hammons*.<sup>83</sup> For example, the parties could have conditioned a fixed bonus on predetermined “deliverables” (or benchmarks) that are themselves verifiable and serve as proxies for the level of efforts requested by the promisor.<sup>84</sup> Alternatively, the parties could have specified an advance against a percentage of the profits from the magic show as is common in many franchising and licensing contexts.<sup>85</sup> Similarly, in *Hunt* the parties could have chosen a single method of determining the purchase price of the agency, or they could have granted to one of the parties a real option to select among the alternative pricing formulae. In both cases, therefore, the parties’ failure to make the agreement sufficiently definite, and thus legally binding, seems to have been intentional and deliberate. In other words, the indefiniteness was endogenous to the contract, and the courts appear to infer from that fact that the parties either do not intend or do not deserve legal enforcement.

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82. *Id.* at 1015.

83. In addition, see *Larson v. Johnson*, 184 F. Supp. 2d 26, 29–38 (D. Me. 2002): In 1995, Johnson asked Larson to supervise a construction project on his property in Maine. Larson was paid a monthly rate of \$6,700 based on the total estimated cost of the project, plus lodging, divided into monthly payments. After completing the project, Johnson was so pleased with the quality of the work and Larson’s effort that he gave Larson a \$175,000 bonus for doing the job. Thereafter, Johnson permitted Larson to live on his property rent free in exchange for basic caretaking duties. Subsequently, in 1999, Johnson asked Larson to supervise a further project to construct a workshop on the property. Larson asked for the same rate (\$6,700 per month) as per the prior job. Johnson responded that he would “take care” of Larson if he would do the project and told him to “trust the Great Oracle” (meaning Johnson). Larson worked on the shop project in addition to his other duties for over nine months, but when he asked repeatedly to be paid at the same rate as the earlier job, Johnson fired him. The court held that the claim to a “bonus” was too indefinite but that Larson’s claim for wages at his earlier rate presented a jury question.

In *Larson*, just as in *Hammons*, the parties failed to exploit any number of commonly used terms to create an enforceable incentive contract. For example, a specific bonus could have been pegged to desirable effects of Larson’s efforts—e.g., finishing the job on time or bringing the project in under budget. Or, the parties could have used a third party, such as an architect, as the arbiter of quality.

84. The stipulation for prescribed “deliverables” is common in many transactional settings, such as contracts between architects and their clients.

85. See, e.g., Victor P. Goldberg, *The Net Profits Puzzle*, 97 Colum. L. Rev. 524, 525 (1997) (describing ubiquitous use of royalty offsets against fixed advances in entertainment industry).

These cases of deliberately incomplete agreements present a genuine puzzle. The sample data show that courts are uniform in declining to enforce these agreements. And yet relatively sophisticated parties in business transactions continue to negotiate such agreements in the shadow of judicial nonenforcement. This behavior appears directly inconsistent with the assumptions of contract theory that parties will not contract over nonverifiable terms but will contract over verifiable terms that can be specified at low cost.

How can we understand these cases? Let us begin by noting some common features: The agreements are simple rather than complex, and the commitments made by each promisor are clear. Thus, the interaction is relatively free from the moral ambiguity that attends complex interactions.<sup>86</sup> In this respect, these cases are quite unlike those described above where the courts enforce the incomplete contract. A plausible hypothesis, therefore, is that these contracts are self-enforcing; either the parties are relying on reputational sanctions or on the overhang of repeated interactions to make their promises credible. Indeed, the similar practice of firms issuing legally unenforceable "comfort letters" to prospective lenders has been explained as a reputational signal that makes the agreements self-enforcing.<sup>87</sup>

But the cases in the sample do not square easily with the common understanding of the domain of self-enforcing agreements. The transactions represented by the cases are, for the most part, isolated, one-shot interactions between relative strangers in heterogeneous markets where reputational constraints are thought to be quite weak.<sup>88</sup> In such an environment, reputation alone is an inadequate means of credibly enforcing promises. Even if others can observe the interaction, they are unlikely to learn about the true reasons why the particular transaction broke down. Without moral clarity, the mere fact of breakdown is not sufficient to impose a reputational cost on either party. If self-enforcement is to be a satisfactory explanation for this puzzle, therefore, its domain must be sig-

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86. The respective undertakings of each party and the failure to perform one or more of them are relatively obvious in simple, clear transactions. In that sense, the transaction has a moral clarity. By contrast, in complex transactions where the parties' performances are iterated, it is often difficult to determine which party has first failed to perform as promised. Given the highly interactive nature of the parties' responses to each other, it is difficult to know whether one party's failure to perform a particular task represents a breach of promise or is a measured, retaliatory response to an earlier failure of performance by the other. For discussion, see Scott, *Conflict and Cooperation*, *supra* note 10, at 2051-53.

87. See Sacasas & Wiesner, *supra* note 78, at 329 ("Legally vague promises and inferences from cautious language are not always valueless in business. . . . Custom shows that memorializing even a weak legal commitment carries some moral and business weight. The letter can be shown to others, and reputations can be injured by the writer's breach of faith.").

88. In 67% (thirty-seven of fifty-five) of the cases where the courts declined enforcement, the transactions were essentially discrete, one-shot interactions between relative strangers. See *infra* table 2.

nificantly larger than is conventionally assumed. In the discussion that follows in Part II, I evaluate emerging economic theories of reciprocal fairness that purport to broaden the domain of self-enforcement to include the transactions evidenced in the data.

## II. RECIPROCAL FAIRNESS AS A MEANS OF SELF-ENFORCEMENT

Ideas about fairness are entrenched in legal doctrine, including contract doctrine. Equitable estoppel, quantum meruit, unjust enrichment, the doctrine of avoidable consequences, unconscionability, good faith, reasonableness, and reformation are just a few of the contract doctrines that might be understood in fairness terms. Moreover, many people hold strong notions of fairness that reflect an apparent predisposition toward reciprocity and equality of treatment. But law and economics scholars have largely ignored the fairness debate. One reason is that the claims of law and economics rest on the predictive power of rational choice theory, a theory that assumes individuals choose between competing alternatives based on rational self-interest.

In recent years, two sustained lines of attack have been mounted against rational choice theory. The first—behavioral decision theory—challenges the rationality assumption and has gained much attention among legal scholars.<sup>89</sup> There is now substantial evidence that individuals make systematic cognitive mistakes in laboratory experiments when asked to solve specified individual decision problems.<sup>90</sup> But these experiments do not test a general theory of how people make decisions. Thus, they raise the question of external validity: Will parties in the real world behave as the experimental subjects did?<sup>91</sup> Because the answer to this question is unclear, the legal implications of behavioral decision theory remain open to debate.<sup>92</sup>

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89. There is an extensive literature traveling under the label of “behavioral law and economics” that builds on research in cognitive psychology and behavioral economics. See, e.g., Christine Jolls, Cass R. Sunstein & Richard Thaler, *A Behavioral Approach to Law and Economics*, 50 *Stan. L. Rev.* 1471 (1998). For a survey of the literature, see Daniel C. Langevoort, *Behavioral Theories of Judgment and Decision Making in Legal Scholarship: A Literature Review*, 51 *Vand. L. Rev.* 1499 (1998).

90. The early seminal work in this field includes Richard H. Thaler, *Quasi Rational Economics* (1991); Daniel Kahneman & Amos Tversky, *Prospect Theory: An Analysis of Decision Under Risk*, 47 *Econometrica* 263 (1979); Richard Thaler, *Some Empirical Evidence on Dynamic Inconsistency*, 8 *Econ. Letters* 201 (1981); Amos Tversky & Daniel Kahneman, *Judgment Under Uncertainty: Heuristics and Biases*, 185 *Science* 1124 (1974).

91. Schwartz & Scott, *supra* note 2; see Jessica L. Cohen & William T. Dickens, *A Foundation for Behavioral Economics*, *Am. Econ. Rev.: AEA Papers and Proceedings*, Special Edition May 2002, at 335, 335 (noting that “lack of theoretical foundations [means that] the policy influence of [behavioral economics] is limited by its inability to predict circumstances in which anomalous behavior will arise (other than in those sorts of circumstances in which it has been observed before) or how it will respond to policy changes”).

92. For a comprehensive analysis of the psychological literature that questions the normative relevance of behavioral decision theory for legal policy, see Gregory Mitchell,

The second critique, which has received much less attention, accepts rationality as a first-order approximation of individual choice, but challenges the claim that all individuals are exclusively motivated by their material self-interest. Recent work in experimental economics has provided robust evidence that many experimental subjects have strong preferences for fairness and reciprocity.<sup>93</sup> This evidence implies that a substantial fraction of people are motivated by fairness concerns as well as by self-interest.<sup>94</sup> If people differ in regard to how selfishly or fairmindedly they behave, this difference has important economic and legal consequences. In particular, the social preferences for reciprocity and equality of treatment are the strongest candidates for developing a theory that expands the range of self-enforcing contracts to include isolated interactions between relative strangers.

This Part describes the results of recent investigations showing that a significant fraction of experimental subjects behave as if fairness were an important motivation (even in isolated interactions) while the other fraction react as if motivated entirely by self-interest. The evidence that in any population roughly half are fair and half are self-interested provides

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Taking Behavioralism Too Seriously? The Unwarranted Pessimism of the New Behavioral Analysis of Law, 43 Wm. & Mary L. Rev. 1907 (2002); Gregory Mitchell, Why Law and Economics' Perfect Rationality Should Not Be Traded for Behavioral Law and Economics' Equal Incompetence, 91 Geo. L.J. 67 (2002).

93. See generally Martin Dufwenberg & Georg Kirchsteiger, A Theory of Sequential Reciprocity, *Games & Econ. Behav.* (forthcoming 2004) (on file with the *Columbia Law Review*); Ernst Fehr et al., Reciprocity as a Contract Enforcement Device: Experimental Evidence, 65 *Econometrica* 833 (1997); Ernst Fehr & Klaus M. Schmidt, A Theory of Fairness, Competition and Cooperation, 114 *Q.J. Econ.* 817 (1999) [hereinafter Fehr & Schmidt, Fairness, Competition and Cooperation]; David K. Levine, Modeling Altruism and Spitefulness in Experiments, 1 *Rev. Econ. Dynamics* 593 (1998); Matthew Rabin, Incorporating Fairness into Game Theory and Economics, 83 *Am. Econ. Rev.* 1281 (1993); Armin Falk & Urs Fischbacher, A Theory of Reciprocity (Inst. for Empirical Research in Econ., Univ. of Zurich, Working Paper No. 6, July 2000), available at <http://www.iew.unizh.ch/wp/iewwp006.pdf> (on file with the *Columbia Law Review*). For a review of the literature, see Ernst Fehr & Armin Falk, Psychological Foundations of Incentives, 46 *Eur. Econ. Rev.* 687 (2002) [hereinafter Fehr & Falk, Psychological Foundations]. Despite the experimental results, rational choice theorists are reluctant to abandon the self-interest assumption. One reason is that this assumption has been quite successful in providing accurate predictions in some economic domains. For example, models based on self-interest make very good predictions about the behavior of parties in competitive markets. There is a further, methodological reason. Changing assumptions about preferences makes it much more difficult to generate testable hypotheses because phenomena can then be explained by assuming the "right" preferences. The experimental evidence suggests, however, that this convention may no longer make much sense. Ernst Fehr & Klaus Schmidt, Theories of Fairness and Reciprocity—Evidence and Economic Applications 2 (Inst. for Empirical Research in Econ., Univ. of Zurich, Working Paper No. 75, 2001), available at <http://www.iew.unizh.ch/wp/iewwp075.pdf> (on file with the *Columbia Law Review*) [hereinafter Fehr & Schmidt, Fairness and Reciprocity].

94. Fehr & Schmidt, Fairness and Reciprocity, *supra* note 93, at 2. The experimental findings are robust as to the experimental subjects, but the relevance of this data for the general population raises the separate question of external validity. See discussion *infra* Part II.D.

the foundation for two complementary theories of fairness that are grounded in the human motivation to reciprocate. In addition, I analyze the results of recent experiments testing these theories in the context of one-shot contractual interactions between perfect strangers. This experimental evidence suggests that incompletely specified contracts that leave space for reciprocation can achieve higher levels of efficiency than more explicit, legally enforceable contracts. These fairness values appear to interact with and complement the self-interest motivation of economic actors.

#### *A. The Empirical Evidence: The Heterogeneity of Fairness and Self-Interest*

The empirical challenge to the self-interest hypothesis began in the 1980s when experimental economists started to study bilateral bargaining games in controlled laboratory settings. One of the games that produced the most dramatic evidence of social preferences other than self-interest was the Ultimatum Game.<sup>95</sup> In the Ultimatum Game, a pair of subjects, separated from each other, must anonymously agree on the division of a fixed sum of money (say \$100). Party A (the proposer) makes a single proposal of how to divide the amount. Party B (the responder) can either accept or reject the proposal. If B accepts, then each takes away her respective sum. If B rejects, then both get nothing. Under the standard assumptions of rational choice theory, there is a Nash equilibrium in which A proposes the smallest money unit available (say \$1) and B accepts. This result obtains because A knows that B is rational and self-interested and thus will always prefer something to nothing. Since B will accept even the smallest amount, A, who is also rational and self-interested, will propose it in order to maximize her own payoff.

The Ultimatum Game has been tested in various settings with relatively large sums of money (in some experiments the amount represents more than three months' income for the participants) and the result directly contradicts the self-interest hypothesis.<sup>96</sup> The evidence shows that any proposal less than 20% of the amount will be rejected with a 50% probability.<sup>97</sup> Moreover, the probability of rejection decreases as the of-

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95. The seminal paper is Werner Güth et al., *An Experimental Analysis of Ultimatum Bargaining*, 3 J. Econ. Behav. & Org. 367 (1982). In addition to the Ultimatum Game, other games were developed to test the self-interest hypothesis, including the Gift Exchange Game, the Trust Game, and the Dictator Game. All of these games have the salient feature of simplicity. Since the games are easy for experimental subjects to understand, the inferences to be drawn regarding their motivations are more robust than they would be were the games complex.

96. Elizabeth Hoffman et al., *On Expectations and Monetary Stakes in Ultimatum Games*, 25 Int'l J. Game Theory 289, 291-96 (1996); Ernst Fehr et al., *Do High Stakes and Competition Undermine Fairness? Evidence from Russia 2-4* (Inst. for Empirical Research in Econ., Univ. of Zurich, Working Paper No. 120, July 2002), available at <http://www.iew.unizh.ch/wp/iewwp120.pdf> (on file with the *Columbia Law Review*) [hereinafter Fehr et al., *High Stakes*].

97. Fehr & Schmidt, *Fairness and Reciprocity*, *supra* note 93, at 5.



fer increases.<sup>98</sup> Thus, it seems clear that many responders do not behave as the self-interest hypothesis predicts. They are prepared to reject offers they perceive as unfair even at a cost to themselves. A further robust result is that many proposers appear to anticipate that if they make a very low offer, there is a high probability that it will be rejected. This result has been confirmed by experiments in another simple game, the Dictator Game, in which the responder has no choice but to accept the proposer's offer. Results show that initial offers in the Ultimatum Game are substantially higher than in the Dictator Game, indicating that proposers apply backward induction and anticipate retaliation against unfair proposals.<sup>99</sup>

The Ultimatum Game demonstrates that a substantial number of the experimental subjects are willing to punish unfair behavior even though the action is costly to them. Another game, the Gift Exchange Game, demonstrates that a large number of responders will voluntarily reward actions that they perceive as generous or fair.<sup>100</sup> In the Gift Exchange Game, the proposer offers a sum of money between one and ten units (imagine that it is a salary offer). The responder can either accept or reject the offer. If she rejects, both subjects receive nothing. If the responder accepts, she must then expend some amount of effort (think of it as job performance) that is costly to her. Standard rational choice theory predicts an equilibrium in which the responder will always choose the lowest possible effort level. (Why try any harder than you have to when effort is costly?) Anticipating this, the proposer will always propose the lowest possible salary offer. But again, the results directly contradict the self-interest hypothesis. All of the studies confirm that the average effort is positively correlated to the offered wage. This implies that responders, on average, will reward generous salary offers with generous efforts (even when it is costly for them to do so).<sup>101</sup>

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98. Colin F. Camerer & Richard H. Thaler, *Ultimatums, Dictators and Manners*, *J. Econ. Persp.*, Spring 1995, at 209, 211; Alvin E. Roth, *Bargaining Experiments*, in *Handbook of Experimental Economics* 253, 256-58 (Alvin E. Roth & John H. Kagel eds., 1995).

99. Fehr & Schmidt, *Fairness and Reciprocity*, *supra* note 93, at 6; see also Alvin E. Roth et al., *Bargaining and Market Behavior in Jerusalem, Ljubljana, Pittsburgh, and Tokyo: An Experimental Study*, 81 *Am. Econ. Rev.* 1068, 1093-94 (1991).

100. Ernst Fehr et al., *Does Fairness Prevent Market Clearing? An Experimental Investigation*, 108 *Q.J. Econ.* 437, 450-53 (1993) [hereinafter Fehr et al., *Market Clearing*]; Fehr & Schmidt, *Fairness and Reciprocity*, *supra* note 93, at 6-7.

101. Fehr & Schmidt, *Fairness and Reciprocity*, *supra* note 93, at 6-7; see Fehr et al., *Market Clearing*, *supra* note 100; cf. Gary Charness, *Responsibility and Effort in an Experimental Labor Market*, 42 *J. Econ. Behav. & Org.* 375 (2000); Ernst Fehr & Armin Falk, *Wage Rigidity in a Competitive Incomplete Contract Market*, 107 *J. Pol. Econ.* 106 (1999) (showing that employees' effort is positively correlated with wage level such that lowered wages prompt decreased employee effort); Ernst Fehr et al., *Gift Exchange and Reciprocity in Competitive Experimental Markets*, 42 *Eur. Econ. Rev.* 1 (1998) (showing that sellers' tendency to reciprocate generates positive relationship between prices offered by buyers and quality levels offered by sellers); Simon Gächter & Armin Falk, *Reputation and Reciprocity: Consequences for the Labour Relation*, 104 *Scandinavian J. Econ.* 1

These experiments yield two important conclusions. First, the data show that the subjects in these experiments are heterogeneous: Some individuals cooperate voluntarily and some do not. In all of these games, the data are remarkably robust in showing considerable individual differences among the subjects. Thus, for example, while a significant fraction of responders in the Gift Exchange Game repay generous offers with generous efforts (the data across experiments are remarkably consistent that about 40% are "fair" types), a substantial fraction (again consistently ranging between 40 and 60%) also always make purely selfish effort choices.<sup>102</sup> But despite the presence of heterogeneous responders (some fair, some selfish), the fraction of fair responders is sufficiently high to make a high salary offer profitable to the proposer.

Second, it is important to emphasize that the interactions in all of these games are one-shot, isolated exchanges. The subjects do not know each other and only interact once, anonymously. Thus, the behaviors that are revealed in the experiments, especially the preference for reciprocity held by a fraction of the subjects, must be distinguished from patterns of cooperation that are revealed in iterated games. Patterns of cooperation and investment in ongoing relationships are perfectly consistent with self-interest. On the other hand, reciprocity in one-shot interactions directly contradicts the self-interest hypothesis.<sup>103</sup>

### B. *Toward a Theory of Reciprocal Fairness*

Can the results of these experiments be explained by relaxing the assumption that all individuals are exclusively motivated by self-interest? There are several candidates for a theory of fairness that focus on the *distributional effects* of any interaction.<sup>104</sup> Thus, for example, one can hypothesize that some fraction of parties are motivated by altruism; that is, their utility increases with the well-being of other people. Altruism explains the generous behavior of responders in gift exchange games, but it is clearly inconsistent with the evidence that some players retaliate and hurt other subjects even when it is costly for them to do so.<sup>105</sup> An alternative hypothesis is that some subjects are motivated by envy; that is, they care not only about their absolute wealth but also about their relative

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(2002) (showing that employees' increased effort in response to increased wages is greater over repeated transactions than in one-shot agreements).

102. Fehr & Falk, *Psychological Foundations*, *supra* note 93, at 687, 691 n.4 (reviewing experimental evidence).

103. *Id.* at 690 & n.2.

104. The utility functions of individuals with social preferences depend not only on their own material payoffs but also on how many material resources are allocated to others. Given these preferences, the actors are assumed to behave perfectly rationally and thus traditional game theoretic models can be used to predict equilibrium outcomes. Fehr & Schmidt, *Fairness and Reciprocity*, *supra* note 93, at 6–7.

105. *Id.* at 13–14.

standing as compared to others.<sup>106</sup> This preference for envy is just the opposite of altruism. It means that a player suffers if she gets less than the other party but does not care about the other party if she gets more. Thus, while envy explains retaliation in ultimatum games and gift exchange games, it does not explain the generous behavior in those interactions.

Ernst Fehr and Klaus Schmidt have developed a theory of inequity aversion that captures the key results in the experimental games and combines the features of both altruism and envy.<sup>107</sup> Under this theory, a person is altruistic to other players if her payoffs are above an equitable benchmark and is envious of others if their payoffs exceed that benchmark. In other words, people compare themselves with others in their group (or with the other player in two-person games) by using a benchmark of equality of distribution. Inequity aversion thus can explain both generous *and* punitive actions toward others.<sup>108</sup>

A second approach to the fairness problem focuses not on the distributional effects of an interaction but on the *intent* that can be inferred from those effects. This "intention-based reciprocity" assumes that a person cares about the intentions of the other party to a bilateral interaction. If the other party treats her kindly, then she wants to return the favor; but if the other party treats her unfairly, then she acts to punish unfair behavior. Thus, in this approach, the key is how a person interprets the actions of the other party.<sup>109</sup> Intuitively, it would seem that the *intention* to be fair plays an important role in many facets of life, independent of the distributive consequences themselves. And indeed, recent experiments provide clear support for the behavioral relevance of the intent of the actor.<sup>110</sup> These experiments show that, in assessing whether or not an action is fair, the subjects consider the intention that is signaled by the action as well as the distributive consequences of the action.<sup>111</sup> Both factors are germane. There is still evidence of reciprocity where subjects are

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106. See *id.* at 14 (noting that this "relative income" hypothesis has long lineage in economics and tracing it back to Thorstein Veblen).

107. See Fehr & Schmidt, *Fairness, Competition and Cooperation*, *supra* note 93.

108. *Id.*

109. Rabin, *supra* note 93. These intention-based interactions cannot be modeled under traditional game theory but require a more complex and less tractable framework known as psychological game theory. See Fehr & Schmidt, *Fairness and Reciprocity*, *supra* note 93, at 18–20.

110. E.g., Armin Falk, Ernst Fehr & Urs Fischbacher, *Testing Theories of Fairness—Intentions Matter* (Inst. for Empirical Research in Econ., Univ. of Zurich, Working Paper No. 63, Sept. 2000), available at <http://www.iew.unizh.ch/wp/iewwp063.pdf> (on file with the *Columbia Law Review*). To isolate the role of intent, Falk, Fehr, and Fischbacher devised an experiment involving two sets of proposers. Proposers from one set were able to signal their intent to the responders by choosing from a range of offers from unfair to generous. Members of the other set of proposers could not signal intent because their "offers" were chosen randomly and the responders knew that the proposers were not responsible for the offer decision. *Id.* at 6–8.

111. *Id.* at 16.

unable to signal intent, but the level of reciprocity is significantly enhanced where the actor can infer the intention of the other player.<sup>112</sup>

Let us summarize, then, the key elements in formulating a theory of reciprocal fairness that is consistent with this substantial body of experimental evidence: First, many individuals behave reciprocally toward others in ways that deviate from purely self-interested behavior. In response to generous actions, many individuals are much more cooperative than rational choice theory would predict, and many individuals are more vengeful than their self-interest demands in responding to actions they perceive as unfriendly.<sup>113</sup> Second, individuals repay gifts and exact punishment even in costly interactions with strangers in which the action will produce no material rewards.<sup>114</sup> Finally, this is a heterogeneous world. Some individuals exhibit reciprocal fairness and others exhibit pure self-interest. Taking all the experiments together from such diverse countries as Austria, Indonesia, the Netherlands, Russia, and the United States, the fraction of reciprocally fair subjects ranges from 40 to 60% as does the fraction of subjects who are selfish.<sup>115</sup>

### C. *Testing Reciprocal Fairness in Incomplete Contracts*

What, then, does a theory of reciprocal fairness tell us about the optimal design of contracts? To see the theory's relevance, consider the following example: Assume that a buyer in New York is interested in acquiring a single shipment of the highest quality carved rosewood furniture—coffee tables, trunks, chests, etc.—from India. The buyer anticipates using this shipment in a one-shot promotion of luxury home furnishings that she is planning to market for the holiday season. In a perfect world, the buyer would visit a market in New York, survey the imported rosewood, and purchase the *highest quality* at the price prevailing for such goods. Unfortunately, no such market exists, so the buyer must contract to purchase the furniture from a seller in India. The buyer has never dealt with the seller before and she does not anticipate doing so again.

There are two alternative contracts the buyer might propose. One option is to propose an obligationally complete contract (that is, a contract in which the parties condition performance on all verifiable infor-

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112. *Id.* at 2.

113. Ernst Fehr & Simon Gächter, *Fairness and Retaliation: The Economics of Reciprocity*, J. Econ. Persp., Summer 2000, at 159, 159 [hereinafter Fehr & Gächter, *Fairness and Retaliation*].

114. *Id.*

115. This heterogeneity is critical to understanding the apparent anomaly between bilateral interactions where evidence of reciprocal fairness is robust and experiments in competitive markets where almost all subjects behave as if they were self-interested. The economic environment determines the preference type that is decisive. Thus, in a competitive market a few selfish players can drive the price to the competitive level and no single fair person can affect that price. On the other hand, in bilateral interactions, the presence of a fraction of inequity-averse players can create incentives for selfish types to make fair offers. See Fehr & Schmidt, *Fairness and Reciprocity*, *supra* note 93, at 38–40.

mation and discard only nonverifiable information). Assume that high quality can be observed but not verified to a court, but that a court is able to verify that the goods do not meet merchantable quality—in other words, a court can determine that the delivered quality is unacceptable under that legal standard.<sup>116</sup> This option thus requires the buyer to specify the quantity of furniture required, set a quality level of ordinary merchantability, and propose to pay the market price commensurate with that quality (say \$50,000). This contract is legally enforceable and, should the Indian seller deliver goods of less than merchantable quality, the buyer can recover expectation damages (although costs and attorneys fees would not be recouped).<sup>117</sup> Moreover, since the seller will charge the market price for merchantable quality goods, much of the contractual surplus (representing the value to the buyer of having goods of at least merchantable quality for its promotion) is retained by the buyer.

There is a second option. The buyer can instead propose an intentionally indefinite contract. This agreement proposes a lower base price (say \$40,000) for goods that are sold “As Is,” subject only to a minimum contract description.<sup>118</sup> In addition, the buyer promises to pay a bonus of *as much as* \$20,000 if the seller delivers high quality goods satisfactory to the buyer. Here, in other words, the buyer is offering potentially to share a portion of the greater contractual surplus with the seller in return for the enhanced effort necessary to produce the specialized goods that maximize the buyer’s value. But this proposal has a twist. The base price term in this incomplete contract would be enforceable (assuming the seller delivered goods meeting the contract description), but under the common law indefiniteness doctrine, neither any additional effort expended by the seller nor the buyer’s promise to give a bonus if satisfied is legally enforceable. Thus, there is a risk that the buyer will receive poor

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116. U.C.C. § 2-314(2)(a) (2002) provides that goods must be “at least such as [would] pass without objection in the trade under the contract description.” Thus, under this standard the court can determine if the attributes of the goods are consistent with the contract description and also are “fit for the ordinary purposes for which such goods are used” under the general legal standard of merchantable quality. § 2-314(2)(c). The assumption that merchantable goods are verifiable can be stated formally. Suppose that a seller could produce quality at varying levels. Denote the realized quality as  $q$  and the distribution of possible quality levels from which  $q$  is drawn as  $\{q_1, \dots, q_a, \dots, q_h\}$ , where  $q_a$  is the average quality. Assume that any  $q < q_h$  is verifiable, but the court cannot determine the quality level of anything that is above that verifiable standard. The parties could then write a contract that requires the seller to deliver the quality level  $q_a$  at the market price  $p_a$ .

117. §§ 2-714(2), -715; Scott & Kraus, *supra* note 27, at 1109–22.

118. Under an “As Is” contract, the seller makes no warranties of quality, see U.C.C. § 2-316(3)(a), but the seller is responsible for delivering goods meeting the basic contract description (e.g., “six rosewood tables, four carved trunks,” etc.), see § 2-313(1)(b) (“Any description of the goods which is made part of the basis of the bargain creates an express warranty that the goods shall conform to the description.”). Comment 4 to § 2-313 explains that a clause generally disclaiming all warranties of quality under § 2-316 (such as an “As Is” disclaimer) cannot reduce the seller’s obligation to supply goods sufficient to meet the contract description.

quality goods for which she must pay \$40,000 (which is her lowest value contract).

Which contract will maximize the expected contractual surplus? It is tempting to suggest that the obligationally complete contract, with a legally enforceable quality term, is on average more likely to maximize expected joint returns. While the first-best contract would have the seller deliver high quality, high value goods and receive a total payment (including the bonus) of \$60,000, the downside risk is that the seller will instead deliver low quality, low value goods and demand the \$40,000 contract price. This risk exists because the indefinite agreement precludes a legal action against the seller should he deliver low quality goods that nevertheless meet the minimum contract specifications. Since high quality is not verifiable, the first-best option is not contractable. The best available option, therefore, seems to be the legally enforceable contract for merchantable quality goods at a \$50,000 price.

This conclusion is strongly supported by rational choice theory. A game theorist would predict that under the indefinite bonus contract the Indian seller will deliver goods that meet the verifiable contract description (in order to recover the \$40,000 contract price) but will choose a low effort level, thus delivering lower quality goods. This is because expending extra effort in producing higher quality goods is costly and the extra effort will not earn a compensating bonus payment. The bonus promise is discretionary and thus a self-interested buyer will always decline to pay any bonus regardless of the efforts expended by the seller.

But do these predictions hold if preferences for fairness and reciprocity are taken into account? Under a fairness regime, the more complete, legally enforceable contract is likely to result in a relatively unequal distribution of the surplus. If the Indian seller is concerned about this, he could punish the buyer in two ways. First, as in an ultimatum game, he could simply reject the contract, in which case both parties would receive a zero payoff. Second, the seller could accept the contract offer but punish the buyer's unfairness by shirking on the effort to produce merchantable quality goods, thus necessitating costly litigation to enforce the agreement. On the other hand, the very same preferences for fairness and reciprocity that might lead a seller to retaliate against unfair behavior would actually enhance the performance of the more incomplete agreement. A fair buyer in this situation will reciprocate a high effort level from the seller by paying a generous bonus. Moreover, assuming that the fraction of fair types in the general population is consistent with the experimental evidence, the probability of a fair bonus being paid is sufficiently great to motivate the seller (regardless of his type) to expend the extra effort. Thus, if a substantial fraction of the population responds to opportunities to reciprocate, we would predict that the indefinite bonus

contract would actually produce a better result for both parties than the more complete, legally enforceable contract.<sup>119</sup>

What do the experimental results show? Fehr, Klein, and Schmidt have designed an experiment involving a single interaction that tests the choice between an incomplete bonus contract that relies on reciprocity and a more complete incentive contract that monitors performance under the threat of costly legal enforcement.<sup>120</sup> In the experiment, each principal was matched randomly and anonymously with a different agent.

119. This result can be stated formally. Assume that  $0 \leq \alpha \leq 1$  of the buyer population are fair types in the sense that these buyers will reciprocate a fair offer from the seller and comply with their promises even if the promises are legally unenforceable. Sellers know  $\alpha$ , but do not know whether the particular buyer they face is fair or unfair. The buyer's valuation for the product  $v$  is  $v_l$  for the merchantable quality good and  $v_h$  for the high quality good with associated prices  $p_l$  and  $p_h$  respectively. The indefinite contract should be written only when it would be socially efficient, which is when it would generate a greater surplus than the enforceable contract such that  $v_h - p_h > v_l - p_l$ . The seller's cost of producing high quality is  $c$  and the cost of producing low quality is normalized to zero. Let  $q_h$  denote the high quality good and  $q_l$  the low quality good. Recalling that quality is observable, the buyer offers the following contract:

I.  $p_l + (p_h - p_l) = p_h$  for  $q_h$

II.  $p_l$  for  $q_l$

The bonus is  $p_h - p_l$ , which the fair buyer pays when the seller delivers high quality. Since quality is unverifiable, the unfair buyer will pay only  $p_l$  regardless of what the seller delivers. Now consider the seller's problem when a buyer offers this contract. The seller will produce high quality when:

$$\alpha p_h + (1 - \alpha)p_l - c \geq p_l$$

The first term on the left hand side is the expected gain from a fair buyer (the probability a buyer is fair times the high quality price); the second term is the expected gain from a cheating buyer (the probability a buyer is a cheater times the low quality price); and the third term is the cost of high quality. The seller can produce low quality costlessly and get the low price, which is the right hand side. This simplifies to:

$$\alpha(p_h - p_l) \geq c$$

The left hand side is the expected marginal gain from producing high quality and the right hand side is the cost. Rearranging terms, the seller will produce high quality when:

$$\alpha \geq \frac{c}{p_h - p_l}$$

Holding constant the percentage of fair buyers, sellers are more likely to produce high quality when the cost of doing so is low— $c$  is small—and when the premium that buyers will pay for high quality is large—the denominator is large. Holding the right hand side constant, sellers are more likely to produce high quality when the fraction of fair buyers is high— $\alpha$  is large. Assuming contracting costs are zero, all buyers will offer the contract described here. This is because the fair buyer is happy to pay for high quality and the unfair buyer is happy to cheat if he gets high quality. So *ex ante* the bonus contract is in every buyer's self interest; only fair buyers will comply, however. In addition, the seller is not trusting the buyer with whom she deals. Rather, she is making a profit-maximizing decision given her knowledge of the percentage of fair buyers and the other parameters. So sellers will sometimes produce high quality and sometimes not.

120. Ernst Fehr et al., *Fairness, Incentives and Contractual Incompleteness* 1–2 (Inst. for Empirical Research in Econ., Univ. of Zurich, Working Paper No. 72, Feb. 2001), available at <http://www.iew.unizh.ch/wp/iewwp072.pdf> (on file with the *Columbia Law Review*) [hereinafter Fehr et al., *Incompleteness*].

The principal had to choose between an incomplete contract, where an initial wage offer was enforceable but both effort and bonus were discretionary, and a more complete contract with explicit incentives for effort and enforceable (and costly) sanctions for nonperformance.<sup>121</sup> Ninety percent of the principals chose the bonus contract. Some principals did not pay a bonus, but a significant fraction did respond generously to higher levels of effort from the agents by paying an appropriate bonus. Thus, the average bonus increased significantly and proportionately with the level of effort provided. This made it worthwhile for agents (whether fair or selfish) to put forth much greater effort than the self-interest hypothesis would predict. Indeed, the average amount of effort induced by the bonus contract was two and a half times that which was induced by the explicit, legally enforceable contract.<sup>122</sup> Thus, on average, the incomplete bonus contract produced a much higher average payoff to both parties.<sup>123</sup>

These experiments demonstrate that powerful incentives can be stimulated in a very incomplete contract between total strangers who may never interact again. Rather than using explicit sanctions, the incomplete contract relies on reciprocal fairness as an enforcement device. Importantly, the incomplete contract does better precisely because it is in-

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121. In a typical session, twelve principals and twelve agents play for ten periods. In each period, an agent faces a different principal. A period consists of three stages. At stage one, the principal has to decide between the explicit or implicit contract. The implicit contract specifies a fixed wage and a desired effort level (between one and ten) that is costly to the agent. In addition, the principal can promise a bonus that may be paid after actual effort has been observed. There is no contractual obligation to pay the announced bonus, nor is the agent obliged to choose the desired effort level, but the principal is committed to paying the fixed wage. The explicit contract also specifies a binding fixed wage and a desired level of effort. Here, however, the principal can impose a fine that has to be paid to the principal in case of verifiable shirking. The verification cost is fixed. At stage two, the agent observes which contract has been offered and decides whether to accept or reject the offer. If the agent rejects the offer, the game ends and both parties receive a zero payoff. If the agent accepts, she then chooses the actual level of effort. At stage three, the principal observes the actual effort. If the principal has chosen the implicit contract, he then decides whether to award a bonus payment to the agent. If the principal offered the explicit contract and the agent's effort falls short of the agreed level, a random draw decides with a probability of one-third whether shirking is verifiable, in which case the agent has to pay the fine. If all players are purely self-interested there is a straightforward result. A selfish principal never pays a bonus. Anticipating this, the agent only provides the minimum effort of one. If the principal chooses the explicit contract, the principal should choose the maximum fine because this is the best deterrent against potential shirking. The parameters of the experiment are chosen such that a risk neutral and selfish agent maximizes expected utility by choosing an effort level of four if faced with the maximum fine. Since the enforceable effort level is only one under the implicit contract, the model predicts that principals prefer the explicit contract. *Id.* at 5-8.

122. *Id.* at 21-23.

123. The more complete, explicit contract produces a lower payoff, all else equal, because shirking is costly to monitor, verify, and sanction. The bonus contract stimulates greater efforts from agents because a principal's promise to pay a conditional bonus is credible and principals incur no enforcement costs. See *id.* at 20.



complete and thus leaves more freedom for the parties to reciprocate. By simply assuming the presence of a substantial fraction of reciprocally fair individuals, this anomalous result becomes predictable: The indefinite bonus contract will produce an outcome significantly closer to the first-best objective than will the more complete, legally enforceable contract. To be sure, this enforcement mechanism is not perfect and, depending on the fraction of reciprocal types in the population, it can fail. Yet the experimental evidence strongly suggests that the effect of reciprocal fairness, an effect that thus far has been neglected in contract theory, is an important element in optimal contract design.

#### D. *A Critique of Fairness Theory: Issues of External Validity*

Notwithstanding the predictive power of reciprocal fairness in experimental settings, the theory has yet to be tested seriously in real world contexts. Thus, any use of fairness theory still raises the question of external validity: To what extent do the experimental results predict how economic actors will behave in the real world? There are four major challenges to the validity of this evidence in explaining real world contracting behavior and in formulating legal policy.

1. *Size of Stakes.* — First is the question of whether the stakes in experimental games are sufficiently high to simulate the response of real world actors in commercial contracts. It seems intuitively plausible, for example, that a preference for reciprocal fairness may become weaker when the monetary stakes are higher. Despite that intuition, however, experiments with relatively high stakes have shown patterns of reciprocity similar to the low-stakes experiments. Lisa Cameron tested the impact of high stakes on negative reciprocity (the willingness to punish unfair behavior) with subjects in Indonesia. In a high stakes Ultimatum Game (representing over three months' income to the subjects), she found no variation in proposers' initial offers and only a slight increase in the acceptance rate of low offers by responders.<sup>124</sup>

More recently, experiments in Russia in a Gift Exchange Game have tested the impact of high stakes on positive reciprocity (the willingness to reward fair behavior). In these experiments, the subjects earned on average between two and three months' income. The study found that a tenfold increase in the size of the stakes had little impact on either the initial wage offer of the "employers" or the reciprocal effort levels of the "workers."<sup>125</sup> It is possible, of course, that experiments with *extremely* high stakes would reveal greater deviations from the predictions of fairness theory, but, absent that data, a casual review of the relative size of the

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124. Lisa A. Cameron, Raising the Stakes in the Ultimatum Game: Experimental Evidence from Indonesia, 37 *Econ. Inquiry* 47, 55 (1999).

125. See Fehr et al., High Stakes, *supra* note 96, at 9–14 & figs.1 & 2, tbl.2 (testing sixty undergraduates at engineering college).

contractual surplus in the sample cases does not suggest that the real world stakes would, by themselves, undermine the theory.

2. *Untrained Individuals Versus Trained Managers as Experimental Subjects.* — The second critique of the experimental evidence is particularly relevant to the use of fairness theory to explain the behavior of contracting parties: All of the experimental subjects are individuals and not firms. Thus, it is unclear to what extent the observed behaviors, even if they apply to the general population, are relevant to contracts between business entities. One might speculate, for example, that individuals in laboratory experiments may respond differently from officers of firms because the experimental subjects are not subject to the same pressures to make profit-maximizing decisions. Moreover, some recent evidence suggests that cognitive “errors” can be mitigated substantially and even be made to disappear when individuals are asked to perform as actors in firms,<sup>126</sup> or when the institutional structures permit communication within a group of actors and/or require competition between actors.<sup>127</sup> It is important to know the nature of the contracting parties in any particular transaction, therefore, before reciprocal fairness can be advanced confidently as an explanation for the observed behavior. As table 2 shows, nearly 50% of the unenforceable agreements in the sample involved either individuals or closely-held firms on *both* sides of the transaction, and in over 75% of the cases one of the parties was either an individual or an owner-manager. In only thirteen cases were both litigants large corporate entities. Thus, the contracting behaviors observed in the cases reflect, in general, the preferences of individual actors and not those of corporate officers acting in an agency capacity.

3. *Artificiality of Experimental Setting.* — The third objection to generalizing these findings to real world contracting behavior is that the subjects (who are typically university undergraduates) may be playing a different game than that of real world actors. For instance, the fair behavior that is observed in the experiments might be driven by the fact that the experimenters can observe the subjects’ actions and students may not want to appear selfish or greedy to their professors. But this speculation seems inconsistent with the basic finding of heterogeneity. There are, after all, significant individual differences observed in the subjects’ behavior. The substantial fraction of subjects who exhibit selfish behavior seem unconcerned about their professors’ opinions. Moreover, when experimenters conducted a Gift Exchange Game where effort levels were set exoge-

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126. See Jennifer Arlen et al., *Endowment Effects Within Corporate Agency Relationships*, 31 J. Legal Stud. 1, 33 (2002) (finding that corporate agency relationship reduces cognitive errors due to endowment effect).

127. See Tilman Slembeck & Jean-Robert Tyran, *Do Institutions Promote Rationality? An Experimental Study of the Three-Door Problem 3* (Univ. of St. Gallen, Discussion Paper No. 2002-21, Sept. 2002), available at [http://papers.ssrn.com/sol3/delivery.cfm/SSRN\\_ID345721\\_code021114500.pdf?abstractid=345721](http://papers.ssrn.com/sol3/delivery.cfm/SSRN_ID345721_code021114500.pdf?abstractid=345721) (on file with the *Columbia Law Review*) (noting that combination of communication and competition completely eliminates anomalous choice in “three-door” problem).

nously, the wage offers were uniformly "unfair" and approached the predictions of the self-interest hypothesis, suggesting that any concern with appearing selfish is rather easily overcome.<sup>128</sup>

In the same vein, however, one might ask whether experimentally observed reciprocal fairness is evidence of a universal pattern of behavior or whether an individual's economic and social background may influence her preferences for fairness. And, if individual circumstances influence preferences, is reciprocal behavior better explained by an individual's attributes (sex, age, or relative wealth) or by the attributes of the group or culture to which she belongs? A recent cross-cultural study using the Ultimatum Game in fifteen small-scale societies found that the self-interest hypothesis fails in each society studied.<sup>129</sup> But the study did show significant cross-cultural differences, both in the equity of offers and the rate of rejections. The findings suggest that observed differences are attributable to group-specific conditions such as social institutions or cultural fairness norms. Specifically, the study shows that the greater the payoff from cooperation in economic production for people in the society and the more those people rely on market exchange in their daily lives the greater the degree of fairness behaviors (e.g., cooperation, sharing, and punishment).<sup>130</sup> This last study is relevant to an inquiry into the causes of deliberately incomplete contracts; it suggests that contracts written in advanced market economies will exhibit high levels of reciprocal fairness behaviors. The higher the fraction of fair types in the population, all else equal, the more efficient is reciprocal fairness as a means of contract enforcement.

4. *Reciprocity as Learned Self-Interest.* — The final objection is related to this last point. The experimental evidence does not show whether observed preferences for reciprocity are inherent characteristics or learned behaviors, or whether they simply represent the failure of self-interested parties to adapt cooperative behavior that works well in repeated interactions to one-shot laboratory interactions. After all, individuals' decision strategies have to work in real world transactions and not in economics experiments. So it would be hardly surprising if individuals devise strategies—or heuristics—that *do* work in real world transactions, and then fail to adjust those strategies to the pure single iteration game in the laboratory. Or, to put it another way, rather than being equally divided between self-interested individuals and reciprocally fair ones, the world may be divided between self-interested individuals who know how to adjust their life strategies in laboratory games and those who don't.

Another possibility is that cultures generate norms of reciprocity that tend to promote individual self-interest. People adhere to the norms be-

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128. Fehr et al., *High Stakes*, supra note 96, at 2.

129. Joseph Henrich et al., *In Search of Homo Economicus: Behavioral Experiments in 15 Small-Scale Societies*, *Am. Econ. Rev.: AEA Papers and Proceedings*, Special Edition May 2001, at 73, 77.

130. *Id.* at 76–77.

cause they believe in them as norms, but the norms themselves are consistent with self-interest, except in laboratory experiments. This is because, *over time*, parties will be better off if they behave fairly. Following the “over time” heuristic consistently, not making distinctions for what appear to be single-iteration games, may be a successful, maximizing strategy. After all, sometimes one might mistake a repeat-play game for a single-iteration game and get punished, or one might pay some unexpected reputational price. Thus, it is possible that a rational utility-maximizer could easily behave in the way the experimental economists describe as reciprocally fair (and not utility-maximizing) simply because the economists are not thinking about the costs of categorizing, and miscategorizing, transactions. In short, there may be no clear conflict between self-interest and the participants’ observed behavior. Reciprocal fairness may not undermine the self-interest hypothesis as much as extend its reach.

This argument is quite plausible, indeed, even persuasive, but it is irrelevant for the purposes of understanding self-enforcing agreements. The important point is that all the available evidence suggests that a substantial fraction of individuals act *as if* they were reciprocally fair in isolated interactions with relative strangers. Whatever the source of that behavior (whether learned, normative, or intrinsic), it is quite relevant to understanding the contracting choices of real world individuals in developed market economies who write intentionally incomplete contracts. The apparent congruence between the experimental evidence and the factual context of the litigated cases thus justifies a further analysis in Part III of the fit between the predictions of fairness theory and the observed behavior of contracting parties.

### III. EXPLAINING INTENTIONALLY INCOMPLETE AGREEMENTS

Assume, for the moment, that the experimental evidence of a heterogeneous world populated by *both* self-interested and reciprocally-fair individuals accurately captures the external reality. This evidence of reciprocal fairness then poses two central questions for the legal regulation of indefinite agreements: Why do parties write intentionally incomplete agreements? And is the presumption of nonenforcement reflected in the common law rule of indefiniteness defensible?

#### A. *Why Do Parties Write Intentionally Incomplete Contracts?*

The sample case data suggest that the incidence of intentionally incomplete agreements is significant. Roughly 240 cases were litigated over a five-year period and nearly 40% of the sample cases consisted of intentionally incomplete agreements.<sup>131</sup> The incidence of litigation might be explained by the hypothesis that the failure to write legally enforceable contracts in transactions of this type actually increases the risk of litigation, and thus the sample represents a larger fraction of the population

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131. See *supra* text accompanying notes 44–48.

of such contracts than would be the case with litigation over otherwise enforceable contracts. This hypothesis implies that there is a selection bias: The litigated cases are more likely to require complex moral judgments about the nature of the promisor's obligations and the conditions precedent to performance. Thus, the parties are unable to settle their dispute because of fundamental disagreements about the nature of their respective commitments. But the data from the sample cases show, to the contrary, that these agreements are relatively simple in form, clear in commitment, and thus free from moral ambiguity. Therefore, we should discard this hypothesis.

An alternative hypothesis, and the one advanced in this Article, is that parties frequently write indefinite agreements because they are a more efficient method of contracting than the alternative. Generalizing from the cases, this hypothesis implies that contracting parties frequently discard verifiable measures of performance in favor of agreements that condition on nonverifiable measures in order to enhance the contractual surplus.<sup>132</sup> The efficiency hypothesis thus implies that deliberately indefinite agreements are ubiquitous and that the litigated cases, representing instances where the transaction broke down, are a relatively smaller set of the total population of such agreements than would be the case with litigation over enforceable contracts.<sup>133</sup> But the efficiency hypothesis seems inconsistent with the basic axioms of contract theory that contracting parties do not contract over nonverifiable measures of performance and, conversely, do contract over verifiable measures of performance where transaction costs are relatively low.

To resolve this apparent contradiction, it is helpful to remember that the axioms of contract theory are premised on the assumption that the contract in question falls outside the self-enforcing range. Thus, verifiability is relevant only when legal enforcement is necessary in order to make the parties' promises credible. The puzzle of why parties appear to prefer nonverifiable agreements over verifiable contracts can be solved, therefore, if these agreements are self-enforcing *and* if the self-enforcing mechanism is more efficient than the alternative of legal enforcement.<sup>134</sup>

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132. Theorists have proposed several possible explanations for why parties might not contract over some verifiable factors. One obvious possibility is that the transaction costs of specifying all the possible verifiable states of the world may exceed any expected benefits. Oliver Hart & John Moore, *Incomplete Contracts and Renegotiation*, 56 *Econometrica* 755, 776 (1988). Transaction costs do not explain the experimental results discussed in Part II.C, however, where subjects who can costlessly elect legal enforcement of verifiable terms instead choose unenforceable bonus agreements.

133. To be sure, there is a general problem of selection bias that suggests caution in generalizing from a population of decided cases to the universe of such agreements. I suggest below some plausible reasons why parties might seek to litigate such a low probability claim. See *infra* text accompanying notes 139-143. But the fact that the direction of any bias is uncertain does lend some credibility to the assumption that the incidence of such informal indefinite agreements is significant.

134. There is a familiar argument that legal enforcement and self-enforcement regulate different aspects of the contractual relationship. On this view, legal enforcement

The difficulty is that most of the sample cases of intentionally indefinite contracts appear to fall outside the self-enforcing range as that domain is traditionally understood. The transactions are predominantly one-shot interactions between relative strangers.<sup>135</sup> A number of the cases do involve parties with some prior association and with a prospect of repeat transactions in the future, but reputation and repeat dealings appear, by themselves, insufficient to ensure that the agreement will be honored.<sup>136</sup> The question, then, is whether reciprocal fairness is sufficient, either by itself or in combination with reputation and repeat play, to make the respective promises credible.

1. *Reciprocal Fairness and Indefinite Bonus Agreements.* — Consider the “indefinite bonus agreements” discussed above in Part I.C.2. Recall that the cases reflect a recurring pattern where a principal offers an agent a base compensation and requests an additional, nonverifiable performance in return for the promise of a nonverifiable bonus. To make a persuasive case for reciprocal fairness (given our empirical assumptions), we need to resolve two subsidiary questions. First, if the parties do not intend their agreements to be legally enforceable, why do they invest resources in negotiating these agreements, frequently reducing their respective promises to a signed writing? To be sure, a promise made by a reciprocally fair person is inherently credible and thus worth bargaining for. Such a person has a social preference for fairness and is prepared to bear costs to achieve an equitable outcome between the parties. But both fair and selfish parties will make the same promises. The bonus offer itself is thus not a signal of one’s type (fair or selfish) because both fair

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functions much as a nuclear umbrella, deterring breach in those states of the world where the payoffs from breach are substantial and exceed the range of self-enforcement. The other side of the argument is that where the payoffs are relatively low, and reputation and repeated interactions are effective, they are a more efficient “conventional” deterrent. See Eggleston, Posner & Zeckhauser, *supra* note 4, at 116 (arguing that “[r]eputational effects, combined with renegotiation as circumstances change,” explain relative efficiency of simple contracts); Scott, *Conflict and Cooperation*, *supra* note 10, at 2044–48 (concluding that extralegal norms and legal rules “regulate different aspects of the contractual relationship in much the same way as conventional and nuclear weapons deter against different acts of aggression and noncooperation by the superpowers”).

135. See *infra* table 2. I coded thirty-seven of the fifty-five unenforceable cases in the sample as discrete rather than relational contracts. While the coding involves some judgment, in each of these cases the facts suggest that the parties entered into a single transaction and that prior to the agreement they were relative strangers.

136. Recall that in heterogeneous markets reputation alone is an inadequate means of credibly enforcing promises. See *supra* text accompanying notes 10–13. Even if others can observe the interaction, they are unlikely to learn about the true reasons why the particular transaction broke down. Without moral clarity, the mere fact of breakdown is not sufficient to impose a reputational cost on either party. Moreover, although the prospect of repeated interactions is always present to some degree, the discipline of conditional cooperation (or “tit for tat”) nevertheless depends on the present expectation of a future payoff larger than the gains from defecting in the current transaction. Scott, *Conflict and Cooperation*, *supra* note 10, at 2027–34.

and selfish principals will promise the same bonus.<sup>137</sup> Nevertheless, given the assumption of heterogeneity (i.e., nearly 40% of the population is reciprocally fair), the promise of a bonus is not cheap talk. The bonus promise is *ex ante* credible since there is a positive probability of a substantial bonus. Thus, the agent, whether fair or selfish, will exert nonverifiable effort equal to the expected value of the bonus.<sup>138</sup>

This argument implies that parties to these agreements do not intend legal enforcement as a secondary deterrent if the transaction breaks down. Thus, the second question: Why do they sue? One answer to this question requires us to recall the Fehr and Schmidt theory of inequity aversion.<sup>139</sup> Under their theory, fair types have a social preference for equality of treatment which implies a willingness to share gains from trade as well as a willingness to bear costs in order to punish inequity. Reciprocally fair people, in other words, are not wimps. They punish selfish behavior. Even though *ex ante* there is a substantial probability of reciprocity, the assumed proportion of selfish people in the population implies that it will be necessary to mete out punishment from time to time. Since both fair and selfish agents will exert some nonverifiable effort to earn a bonus,<sup>140</sup> the theory implies that breakdown will most often occur when selfish principals fail to pay a bonus earned by nonverifiable performance. This inference supports a testable prediction: Litigation primarily occurs when a selfish principal fails to pay a bonus that the agent has earned by nonverifiable performance. In such a case, fair agents will be willing to bear costs in order to punish the principal. A fair agent will be willing to sue even when the expected value of litigation is negative.<sup>141</sup> The evidence from the sample cases is consistent with this

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137. Since a selfish principal can costlessly copy the promise to give a bonus, there is no separating equilibrium. See Fehr et al., *Incompleteness*, *supra* note 120, at 12–14.

138. Note that one of the counterintuitive implications of the Fehr and Schmidt model of inequity aversion is that a reciprocally fair agent will shirk more than will a selfish agent. This is because the risk of not being paid a bonus by the principal is more costly for a fair agent than it is for a selfish agent. A selfish agent will only bear the cost of uncompensated effort if the bonus is not paid. But a reciprocally fair agent bears two separate costs if the principal does not pay the bonus. In addition to the costs of uncompensated efforts, this agent also feels worse because of her social preference for equality. Thus, the inequity of the selfish principal receiving a more valuable performance than he “paid for” is a further cost that reduces the expected value of the bonus to this agent.

139. See *supra* text accompanying notes 107–108.

140. Recall, however, that the nonverifiable efforts of fair agents will be lower than those of selfish agents. See *supra* note 138.

141. A self-interested plaintiff will not litigate unless the expected value of litigation is positive—that is, where the probability of prevailing ( $P$ ) multiplied by the expected damages ( $D$ ) minus the expected costs of litigation ( $C_p$ ) is greater than zero (i.e., where  $PD - C_p > 0$ ). A fair agent, however, experiences the unfairness of the denied bonus as an additional cost. A fair agent will litigate, therefore, so long as the probability of prevailing ( $P$ ) multiplied by the expected damages ( $D$ ) plus the expected litigation costs to the defendant ( $C_d$ ) exceeds the expected costs of litigation to the plaintiff ( $C_p$ ) (i.e., where  $PD + C_d > C_p$ ).

prediction. In each of the indefinite bonus cases, the plaintiff is an agent suing her principal for breach of contract and claiming the right to a bonus earned by a nonverifiable performance.<sup>142</sup>

Moreover, there is no reason to believe that the parties to these agreements understand *ex ante* that there is such a low probability of enforcement if the transaction breaks down. These are not agreements where the parties have expressly announced their intention not to be legally bound.<sup>143</sup> Rather, the nature of these agreements—simple, clear undertakings to treat the other party fairly—suggests that the parties are relying on the potency of reciprocity rather than on the absence of legal enforcement *per se*. Thus, a more plausible hypothesis is that, from the parties' perspective, the *ex ante* prospect of legal enforcement is ambiguous. After all, a review of the cases would suggest to any lawyer that sometimes indefinite contracts are enforced and sometimes they are not. In the absence of a systematic, functional analysis, of the sort I have undertaken in this Article, there is no reason to believe that the distinction between deliberately incomplete agreements and other relational contracts would be obvious to the parties who are planning these transactions. By electing to leave the question of legal enforcement ambiguous, the parties increase the credibility of the threat of punishment should a selfish principal fail to pay a bonus to a deserving agent.

The discussion thus far suggests that reciprocal fairness offers a superior contracting alternative to legal enforcement even in one-shot interactions between relative strangers. The experimental evidence supports three reasons why a self-enforcing bonus agreement is more efficient than a legally enforceable contract that conditions only on verifiable measures of performance. First, legal enforcement is significantly more costly than self-enforcement. Second, reciprocal fairness allows parties to make credible promises regarding nonverifiable measures of performance, thus increasing joint surplus. In the case of the indefinite bonus agreement, the principal has two opportunities to encourage reciprocity—by increasing the initial base compensation and by promising a bonus. Finally,

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142. To be sure, if the indefinite bonus contract were structured as a unilateral contract—a promise to pay a bonus in return for enhanced efforts—the agent could not be sued for failing to perform, as the principal did not request a return promise. However, it is clear from the facts of most of the cases in the sample that the agreement was structured bilaterally; that is, the agent promised to perform nonverifiable tasks and the principal promised to pay a nonverifiable bonus. See, e.g., *Nat'l Mortgage Corp. v. Greenwich Capital Fin. Prods., Inc.*, 53 Fed. Appx. 510, 511 (10th Cir. 2002); *Brines v. XTRA Corp.*, 304 F.3d 699, 700–03 (7th Cir. 2002); *Larson v. Johnson*, 184 F. Supp. 2d 26, 30–31 (D. Me. 2002); *Sugerman v. MCY Music World, Inc.*, 158 F. Supp. 2d 316, 319–21 (S.D.N.Y. 2001); *Cleveland Wrecking Co. v. Hercules Constr. Corp.*, 23 F. Supp. 2d 287, 290 (E.D.N.Y. 1998); *Burns v. Dees*, 557 S.E.2d 32, 34–35 (Ga. Ct. App. 2001); *Smith v. Hammons*, 63 S.W.3d 320, 322 (Mo. Ct. App. 2002); *Lowinger v. Lowinger*, 733 N.Y.S.2d 33, 35–36 (App. Div. 2001).

143. Express declarations of an intention not to be legally bound are common, particularly in formal letters of intent. Indeed, such clauses, known as "Texaco clauses," have become standard in pre-closing documents. *Johnston*, *supra* note 46, at 404.



these self-enforcing bonus agreements may help to solve a multitasking problem in instances where the agent's performance involves both verifiable and nonverifiable tasks. Holmstrom and Milgrom have argued that, in multitasking contexts, a flat wage rate for all tasks is more efficient than a more complete, incentive contract that links compensation to verifiable tasks.<sup>144</sup> This is because linking verifiable performance measures to compensation will cause the agent to substitute away from the nonverifiable tasks to the compensated verifiable tasks, thus impairing overall performance. Self-enforcing bonus agreements "may avoid [this] inefficient effort allocation across tasks because the actual bonus can be made dependent on the performance of the agent in all tasks."<sup>145</sup>

2. *Reciprocal Fairness and Repeated Interactions as Self-Enforcing Complements.* — Even if self-enforcing bonus contracts are more efficient *on average* than legally enforceable contracts that condition only on verifiable performance, the assumption of heterogeneity nevertheless implies a higher variance in the returns for the self-enforcing alternative. If the parties are risk neutral, the variance will not matter and they will predictably choose the more efficient contract. This is because variance measures risk, and risk neutral parties are indifferent to risk.<sup>146</sup> But one might expect many of the individual contracting parties in the sample to be risk averse.<sup>147</sup> The puzzle, then, is to figure out why individual contractors might strongly prefer the indefinite bonus alternative.<sup>148</sup> One plausible hypothesis is that even though cooperative patterns based on reputation and repeated interactions may be weak in any particular case, individuals learn to reciprocate because reciprocation pays off in so many ongoing transactions over time. This suggests that cooperative behavior is self-reinforcing. Successful cooperation that generates a reputation for trustworthiness or produces returns in ongoing transactions is consistent with self-interest and also causes parties to learn to care more about the other party's payoff. This, in turn, strengthens an individual's willingness

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144. See Bengt Holmstrom & Paul Milgrom, *Multitask Principal-Agent Analyses: Incentive Contracts, Asset Ownership, and Job Design*, J.L. Econ. & Org., Vol. 7 Special Issue 1991, at 24, 24–27.

145. Fehr et al., *Incompleteness*, supra note 120, at 27 (emphasis omitted).

146. For readers not versed in statistics, variance is a measure of how far a particular outcome may deviate from the mean of the distribution.

147. In eleven of the eighteen indefinite bonus cases, both of the parties were either individuals or owner-managers of closely-held firms. See *infra* table 2.

148. It is tempting to suggest that the experimental subjects in the Fehr, Klein, and Schmidt incomplete contract experiments were risk averse as well. However, while each interaction was one-shot, a session of the incomplete contract experiments consisted of ten different rounds against ten different contracting partners. See Fehr et al., *Incompleteness*, supra note 120, at 15. Thus, the experimental subjects playing the bonus contract could presumably diversify across the entire session. Diversification is not as readily accomplished in one-shot interactions in the real world.

to reciprocate voluntarily even where the prospect of repeat dealings is quite low.<sup>149</sup>

Moreover, in the transactions represented by the sample cases, other cooperative influences are clearly present to some degree even if they may not be sufficient *by themselves* to make the promises credible. Here the hypothesis is that the various self-enforcing mechanisms—reputation, repeated interactions, and reciprocity—are complements. There is some experimental evidence that supports this claim. Brown, Falk, and Fehr compared the effort levels of agents in a one-shot gift exchange game with the effort levels in a similar game in which repeated interaction was an additional, material incentive.<sup>150</sup> They found that effort levels in the one-shot interaction were above the level predicted by pure self-interest (thus implying a significant fraction of reciprocal agents) but that the repeated interaction condition caused a significant increase in the effort level.<sup>151</sup>

It is not entirely clear why this complementarity exists between repeated interactions and reciprocal fairness. One conjecture is that the properties of incentives created by repeated interactions are very similar to the properties of incentives created by invitations to reciprocate. Both self-enforcing incentives are imposed implicitly and *ex post* while the incentives created by legal enforcement are imposed explicitly and *ex ante*.<sup>152</sup> Thus, for example, in a repeat game framework a principal can punish a selfish agent *ex post* without risking offending a cooperator by announcing in advance a sanction for inadequate efforts.

Casual empiricism supports the hypothesis that self-enforcing mechanisms are complements and, especially in multitasking contexts, may motivate parties to write indefinite bonus contracts. Perhaps the most prevalent example of such contracts is in academic employment. Many, if not most, academic employment contracts resemble the indefinite bonus agreements described above. The principal (say a law school dean) makes a legally binding base salary offer to the agent (the individual faculty member). The salary is invariant to levels of effort above a bare minimum verifiable performance (e.g., avoiding acts of moral turpitude or a substantial failure of performance). But many verifiable measures of performance are discarded (e.g., demonstrating basic teaching competence, prompt performance of specific governance responsibilities, and participation in the intellectual life of the institution). At the same time,

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149. Experiments by van Dijk, Sonnemans, and van Winden indicate that successful cooperation through repeated interactions strengthens the parties' willingness to take the interests of others into account. Frans van Dijk et al., *Social Ties in a Public Good Experiment*, 85 J. Pub. Econ. 275, 291 (2002).

150. Martin Brown, Armin Falk & Ernst Fehr, *Contractual Incompleteness and the Nature of Market Interactions* (Univ. of Zurich, Inst. for Empirical Research in Econ., Working Paper No. 38, Feb. 2002), available at <http://www.iew.unizh.ch/wp/iewwp038.pdf> (on file with the *Columbia Law Review*).

151. *Id.* at 1–2.

152. See Fehr & Falk, *Psychological Foundations*, *supra* note 93, at 701–04.

the principal requests additional nonverifiable performance (quality research, devoted attention to teaching, and shared governance responsibilities, etc.) and promises an indefinite bonus (merit raises in the future). Both the enhanced performance and the bonus are indefinite terms and thus are not legally enforceable under the common law rule.

The standard academic contract is, therefore, largely self-enforcing. Clearly, self-interested cooperation makes the respective promises at least partially credible. Repeated interactions (merit raises awarded in the past motivate nonverifiable performance in anticipation of raises in the future) as well as reputation (the dean's reputation for good judgment and even-handedness) motivate nonverifiable performance by faculty. But both reputation and repeated interactions are insufficient by themselves to make the promises to perform and to reward performance fully credible. Faculty can move to other institutions thus creating an end-game problem that undermines the discipline of repeated interactions. Moreover, reputation is relatively weak as a basis of enforcement because of strong norms against sharing bonus information among faculty. Thus, it is plausible that the additional incentive effects of reciprocity complement the self-enforcing patterns of cooperation based on reputation and repeat play. In combination, these effects motivate a contractual design that dominates the alternatives of a trust contract (lockstep raises) or an enforceable incentive contract that ties compensation to verifiable tasks such as the number of students taught or number of papers published (creating a multitasking problem).<sup>153</sup> In these and similar settings, therefore, reciprocity reinforces other cooperative influences and thus offers parties many more opportunities to use self-enforcing agreements rather than legally enforceable contracts.

3. *Comfort Agreements as Screen for Self-Enforcement.* — The assumption of heterogeneity—some folks behave fairly and some exhibit self-interest—implies that intentionally indefinite agreements (that rely exclusively on reciprocal fairness) are not first-best efficient. That conclusion is supported by both the experimental evidence and the evidence of transactional breakdown from the sample of litigated cases. The evidence of inefficiencies in self-enforcing bonus contracts may offer a plausible explanation for the common use of legally unenforceable “comfort agreements.” To understand why, recall from the sample data set that these “comfort agreements” are deliberately indefinite agreements that look to the formation of a future relationship. Some are in the form of formal letters of intent but most are more informal agreements.<sup>154</sup> They

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153. The statement in the text is confirmed by a survey of over one hundred law school deans that I conducted while serving as President of the American Law Deans Association from 1999–2001. More than 80% of the responding deans reported that faculty compensation was determined by a base salary plus indefinite merit increases based on nonverifiable efforts (high quality scholarship, teaching, etc.).

154. See *infra* table 2.

include agreements to lease space in a shopping mall,<sup>155</sup> to execute an executive compensation agreement,<sup>156</sup> to sell an insurance agency,<sup>157</sup> to enter into a partnership,<sup>158</sup> to license the construction of a golf course,<sup>159</sup> and to invest in a proposed gambling casino.<sup>160</sup> In each case, the courts have held that the indefinite terms in the comfort agreement constitute an unenforceable "agreement to agree."<sup>161</sup>

The question we have posed earlier recurs: Why do parties write these intentionally unenforceable agreements? It is well known that more formal letters of intent are part of a continuous negotiation process.<sup>162</sup> The parties' intentions are to go to the next step and convert the agreement into an enforceable contract. Typically, the enforceable contract is complex and final negotiation turns on several variables unknown to the parties at the time the letter of intent is executed. In these cases, therefore, the parties may be learning about each other's competence<sup>163</sup> or waiting to see if a market shift makes the venture less attractive.<sup>164</sup> But most of the comfort agreements in the sample cases do not fit the conventional letter-of-intent model. The informal agreement and the future transaction are commonly separated in time and are not part of an ongoing negotiation process. Moreover, the comfort agreement, like the indefinite bonus contract, is simple in form and offers clearly defined opportunities to reciprocate.<sup>165</sup> One hypothesis is that these agreements, rather than (or in addition to) being designed for parties to learn about each other's competence or about market conditions, are designed to allow parties to learn about each other's taste for reciprocal fairness. To be sure, self-enforcing bonus agreements are more efficient *on average* than legally enforceable agreements that condition only on verifiable measures of performance. But the assumption of heterogeneity means that individual promisees risk responding with enhanced efforts to a self-ish promisor who subsequently fails to pay any bonus. This inefficiency could be reduced if the parties were able effectively to screen for reciprocally fair contracting partners.

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155. *OfficeMax, Inc. v. Sapp*, 132 F. Supp. 2d 1079, 1083 (M.D. Ga. 2001).

156. *Stout v. Fisher Indus.*, 603 N.W.2d 52, 54–55 (N.D. 1999).

157. *Hunt v. Coker*, 741 So. 2d 1011, 1013 (Miss. Ct. App. 1999).

158. *Bergman v. DeIulio*, 826 So. 2d 500, 502 (Fla. Dist. Ct. App. 2002).

159. *Homestead Golf Club, Inc. v. Pride Stables*, 224 F.3d 1195, 1198 (10th Cir. 2000).

160. *Mays v. Trump Ind., Inc.*, 255 F.3d 351, 354–55 (7th Cir. 2001).

161. See *infra* table 2.

162. See Johnston, *supra* note 46, at 449–50.

163. See, e.g., *Hoffman v. Red Owl Stores, Inc.*, 133 N.W.2d 267, 269–71 (Wis. 1965) (franchisor increases capital contribution requirements following observation of potential franchisee's trial period as store manager); Johnston, *supra* note 46, at 401–03.

164. See Ronald Gilson & Alan Schwartz, *Understanding MACs and MAEs* 42–44 (Apr. 30, 2003), at <http://www.yale.edu/law/ccl/papers/merger15.pdf> (unpublished manuscript, on file with the *Columbia Law Review*) ("The traditional [material adverse change clause] permits a buyer to exit when a material adverse change or effect would make the deal unprofitable for it.")

165. See *supra* text accompanying notes 78–85.

The willingness to make an indefinite promise that conditions on nonverifiable factors is not, by itself, a reliable signal that the promisor is a reciprocally fair type. As we have seen, selfish promisors will copy the signal since the invitation to reciprocate will induce greater efforts from the promisee and thus greater returns to the promisor. But the typical comfort agreement has an additional feature. The agreement itself creates opportunities to reciprocate *in advance* of the formalization of the relationship between the parties. Recall, for example, the facts of *Hunt v. Coker*,<sup>166</sup> where the parties entered into a comfort agreement expressing their joint desire for Coker to sell, and Hunt to buy, Coker's insurance agency.<sup>167</sup> The events that followed are instructive. Upon execution of the agreement, Hunt relocated his agency to Coker's building. Both Coker and Hunt worked their own accounts, essentially operating separate businesses but sometimes brokering policies together. Over time, Coker became unhappy with the quality of Hunt's work and informed him the offer to sell would not be honored.<sup>168</sup>

Why would Coker be concerned about selfish behavior by Hunt during this interim period?<sup>169</sup> Recall that the purchase price agreed upon by the parties was one of several alternatives, each of which was based on the percentage of commissions that renewed over five, six, or seven years. Thus, the sale price of the agency was directly linked to Hunt's nonverifiable efforts. Viewed in this light, the transition period created by the comfort agreement takes on new meaning. Coker's numerous opportunities to observe Hunt's behavior may have served as a means of screening for a reciprocally fair business partner. Hunt's subsequent shirking then would have signaled that he was a "selfish" type and that the ultimate sale agreement would not be self-enforcing.

There are two ways that comfort agreements such as the one in *Hunt* can function as a screening device. First, the agreement provides opportunities to observe the behavior of the promisor in response to opportunities to reciprocate. This gives the promisee the opportunity to acquire personal knowledge of the character of the promisor.<sup>170</sup> To be sure, some promisors may attempt to "act fair" during the interim period and return to selfish behavior when the future relationship is cemented. But, in addition to observation, the comfort agreement serves to separate in

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166. 741 So. 2d 1011 (Miss. Ct. App. 1999).

167. See *supra* text accompanying note 79. "The agreement provided that Hunt would consolidate his location with Coker as soon as possible with each party paying their own expenses . . . until the date of sale." 741 So. 2d at 1013.

168. *Hunt*, 741 So. 2d at 1013.

169. There is no evidence of precisely what behavior by Hunt led to Coker's decision to terminate the relationship. Coker could have been unhappy either because he observed that Hunt was an incompetent insurance broker or because he observed Hunt shirking. My point is only that screening for shirking and other selfish behavior is a plausible, and additional, reason why parties enter into such agreements.

170. George A. Akerlof, *The Market for "Lemons": Quality Uncertainty and the Market Mechanism*, 84 Q.J. Econ. 488, 500 (1970).

time the opportunity to reciprocate from the subsequent transaction that is ultimately contemplated. It is thus an example of the expenditure of time for the purposes of communication.<sup>171</sup> In this case, potential transactors are not only subject to observation but they must spend considerable time in the process of executing an agreement that is only self-enforcing.<sup>172</sup> Since reciprocally fair individuals are able to capture the returns to general information about their type through an enhanced reputation for cooperation, they are more willing to spend resources to provide this information.<sup>173</sup> Much how a person's willingness to wait in a queue for tickets to an event signals her desire to attend the show, the expenditure of time performing a nonverifiable promise is itself a signal; in this case it may signal a preference for reciprocity.<sup>174</sup>

In sum, while the available evidence is sufficient only for intelligent speculation, the sample of litigated cases suggests that the widespread use of informal comfort agreements may be a function of their properties as screens for voluntarily cooperative behavior. Parties entering relationships in which measures of performance are nonverifiable will benefit from personal knowledge of the fairness preferences of their contracting partners. Such knowledge will permit them to enter transactions in which key measures of performance are nonverifiable without serious risk.

#### B. *Should Courts Refuse to Enforce Intentionally Incomplete Agreements?*

In the preceding discussion I have argued that the theory of reciprocal fairness significantly expands the domain and the potency of self-en-

171. A. Michael Spence, *Time and Communication in Economic and Social Interaction*, 87 Q.J. Econ. 651, 651–52 (1973).

172. Many formal letters of intent indicate explicitly that the parties do not intend to be legally bound, thus reducing, but not eliminating, the threat of subsequent litigation by a disappointed promisee. Johnston, *supra* note 46, at 403–04. None of the informal comfort agreements in the litigated cases contained a term expressly declining legal enforcement. It is puzzling why this is so, particularly in those agreements where legal counsel assisted in the drafting process. One inference is that parties prefer to leave the question of potential legal enforcement deliberately ambiguous. See *supra* text accompanying note 143.

173. Another way of expressing the point in the text is that a selfish party can perhaps dupe a single promisee and capture a larger surplus but, once her selfish nature is revealed (the bonus is not paid), she is unable to replicate the transaction at low cost. On the other hand, a reciprocally fair party will not only earn a portion of the enhanced surplus in this transaction, but, by revealing her type (the bonus is paid), she will develop a reputation for fairness that can be exploited at lower cost in future transactions. See Joseph E. Stiglitz, *The Theory of "Screening," Education, and the Distribution of Income*, 65 Am. Econ. Rev. 283, 287 (1975).

174. For a similar analysis that focuses on psychological phenomena to explain self-selection of trustworthy individuals who opt in to closely-held corporations, see Margaret M. Blair & Lynn A. Stout, *Trust, Trustworthiness, and the Behavioral Foundations of Corporate Law*, 149 U. Pa. L. Rev. 1735, 1803–07 (2001); see also Eric A. Posner, *Law and Social Norms* 49–67, 23, 25 (2000) (arguing that gift giving and styles of dress may serve to signal parties' trustworthiness).

forcing contracts. But the evidence also shows that self-enforcement does not achieve first-best efficiency. Given a heterogeneous population of selfish and fair individuals, the self-sanctions for deterring breach of promise are imperfect. Thus, a logical question is why shouldn't the legal system combine reciprocity with legal enforcement? Would it not be more efficient (and more fair) for courts to fill gaps in intentionally incomplete agreements where the evidence *ex post* reveals that the transaction broke down (presumably because one of the parties was selfish)?

To make the question concrete, return to the contracting example of the New York buyer and the Indian seller described above in Part II.C. Assume that the New York buyer elects the self-enforcing indefinite contract and that the seller delivers goods that are unsatisfactory to the buyer. The buyer, in turn, declines to pay a bonus. Subsequently, the buyer sues for breach of contract, seeking rescission and damages, and the seller counterclaims for a "reasonable" bonus. Should the law seek to complete this contract for the parties?

To answer this question, a court must select between two distinct approaches to the problem of indefinite agreements. One option is to follow the modern presumption and enforce the agreement notwithstanding the indefinite terms. For example, a court could order a "fair" result by imposing an equitable adjustment—a reasonable bonus in return for a reasonable effort—taking all of the contextual factors into account as they appear at the time of adjudication.<sup>175</sup> This outcome follows from the premise that these intentionally indefinite contracts create reciprocal duties and courts should enforce those duties when the parties subsequently cannot agree.<sup>176</sup> Alternatively, a court could follow the precedent of the cases from the sample and dismiss both the buyer's claim for damages and the seller's claim for a reasonable bonus on the grounds of

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175. Contract law typically fills such gaps with broad standards of reasonableness when the conditions for more precise rules are not met. In fact, reasonableness standards are common because the conditions for creating efficient bright-line default rules are very difficult to meet. See Schwartz & Scott, *supra* note 2.

176. To enforce this agreement, the court must determine what a "reasonable" effort by the seller would entail and, if that performance is satisfied, what "reasonable" bonus by the buyer is required. The reasonableness standard thus provides a basis for enforcing either the additional effort obligations of the seller, the bonus payment obligations of the buyer, or both. A court might use either an *ex ante* or an *ex post* perspective in enforcing these agreements. If the court simply fills in the gaps *ex post*, subsequent courts (and statutory drafters) ideally should not be tempted to reify the result in the particular case as a default standard. *Ex post* adjustment, in short, argues for a "black box" style of decisionmaking. It follows that courts following this approach should be hospitable to attempts by later parties to alter or eliminate the emergent standard in their contracts. The *ex ante* approach aims to create defaults that would be useful to subsequent parties writing similar agreements. Unfortunately, default standards of reasonableness seldom are good fits. In the first place, they create moral hazard. Even where the resource costs to the state are low, such default terms are inefficient to the extent that they specify terms that condition on unobservable or unverifiable information. To be sure, subsequent parties can, in theory, reject the state rules and select their own alternatives. But even if opting out is relatively easy, an inefficient default functions as a "tax" on private contracting.

indefiniteness. Under this common law approach, the evidence that the material, verifiable terms were not specified would generate an inference that the parties did not intend to be legally bound. The claim would be dismissed, and the losses would lie where they fall.

Which approach is best? At first blush, the robust evidence of reciprocal behavior seems to require that the law acknowledge explicitly the value of reciprocal fairness. One might argue, for example, that courts should create default standards of reasonableness to bolster the implicit patterns of reciprocity that have broken down in this particular instance.<sup>177</sup> Or, alternatively, one might suggest that, where a contract creates an opportunity for beneficial reciprocity, a court should enforce such a duty by imposing an equitable adjustment when one of the parties has apparently behaved selfishly.<sup>178</sup>

For several reasons, however, the theory of reciprocal fairness supports adherence to the common law indefiniteness doctrine. First, the prospect of legal enforcement can create a moral hazard risk that may deter parties from writing self-enforcing agreements. To see why, return again to the example of the Indian seller and the New York buyer. Assume the parties have chosen the indefinite bonus contract. Now assume that courts abandon the common law rule on indefiniteness and adopt the modern presumption of enforcement. This implies that a court will, with positive probability, entertain a breach of contract claim and try to decide what is fair. The prospect that the agreement might be legally enforceable creates an enhanced risk of cheating by the seller. A seller who produces low quality goods may now threaten to sue for breach of contract, claiming that she produced high quality goods and was entitled to a bonus. Since high quality is not verifiable, the buyer faces an enhanced risk of hold-up. The problem is that the legal enforcement rule itself creates a motive for a seller to claim the right to a bonus payment for a nonverifiable performance, apart from any assumption that fair sellers will sue because they are angry. Given what a court will do, litigation can maximize any seller's expected profits and thus make credible the hold-up threat.

Moreover, if a court will potentially enforce a bonus promise against the buyer where the seller has, in fact, delivered low quality goods, it no longer is rational for buyers to offer the intentionally incomplete bonus agreement.<sup>179</sup> Thus, the prospect of legal enforcement—and its associ-

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177. See, e.g., Richard E. Speidel, *Court-Imposed Price Adjustments Under Long-Term Supply Contracts*, 76 *Nw. U. L. Rev.* 369, 420–22 (1981) (arguing that court-imposed price adjustment is preferable to efficient risk allocation).

178. See, e.g., Robert A. Hillman, *Court Adjustment of Long-Term Contracts: An Analysis Under Modern Contract Law*, 1987 *Duke L.J.* 1, 4–14.

179. To be sure, a promisee will sometimes expressly agree to a “best efforts” or “reasonable efforts” contract in which a court may potentially be asked to determine whether the efforts given by the promisor were “best” or “reasonable.” Typically, such levels of effort will be nonverifiable. But parties generally will choose such broad standards that condition on nonverifiable factors only where the contract is otherwise structured so



ated moral hazard risk—may motivate the buyer to abandon the bonus agreement altogether. This would be an inferior outcome because, as we have seen, the self-enforcing bonus agreement is socially efficient: High quality generates a greater surplus than low quality and there is a positive probability that the contract will generate high quality.

Now consider the alternative: The court denies relief on the grounds of indefiniteness; it cannot verify whether the seller delivered high quality goods and thus cannot grant a remedy. The nonenforcement approach eliminates the hold-up threat and restores the buyer's incentive to offer the more efficient self-enforcing bonus contract. In short, any enforcement rule (or standard) that conditions on nonverifiable factors (such as high quality) will produce an inferior outcome to a nonenforcement rule that leaves the parties room for reciprocity.

The preceding argument shows that an attempt to enforce deliberately incomplete contracts by adopting a broad standard of reasonableness or good faith is socially inefficient. A further question is whether the same conclusion holds if courts attempt to limit legal enforcement to the *verifiable* terms in agreements that otherwise depend on self-enforcement. Recall that in the example of the Indian seller and the New York buyer the parties initially faced a choice between an obligationally complete contract (merchantable quality goods for a \$50,000 price) and an indefinite bonus contract (a \$40,000 base price with a bonus of \$20,000 in return for the delivery of high quality goods). Now suppose that the parties reach an agreement that combines the features of both options. The buyer offers a price of \$50,000 with a \$10,000 bonus if the seller delivers high quality goods satisfactory to the buyer. In addition, the contract specifies that the buyer can recover \$10,000 in liquidated damages if the seller does not provide *at least* merchantable quality goods. Merchantable quality, recall, is verifiable to a court.<sup>180</sup> In this example, then, the parties have agreed to a verifiable obligation that, if severable from the indefinite bonus, would be legally enforceable. Assume the seller delivers nonmerchantable goods that do not “pass without objection in the trade”<sup>181</sup> and the buyer seeks recovery of the stipulated damages. The seller claims, in turn, that the entire agreement is indefinite and unenforceable.

It is tempting to suggest that granting a remedy to the buyer in this instance is socially optimal. After all, this portion of the agreement was definite and certain. The breach by the seller does not implicate the indefinite promise of a bonus for high quality performance. But the critical question is whether legal enforcement of the verifiable terms would adversely affect the potency of reciprocity as a means of enforcing the

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that the party with discretion has incentives to take both parties' interests into account, thus obviating the need for courts to evaluate the nonverifiable measures of performance. See Schwartz & Scott, *supra* note 2; Gilson & Schwartz, *supra* note 164.

180. See *supra* notes 116–117 and accompanying text.

181. U.C.C. § 2-314(2)(a) (2002).

nonverifiable terms of the agreement. In other words: How do explicit, legal incentives to abide by the terms of a contract interact with motivations of fairness and reciprocity?

A recent series of experiments by Fehr and Gächter using a variation on the Gift Exchange Game examines this question.<sup>182</sup> In the control version of these experiments, buyers offer a trust contract at a stipulated price and a desired level of effort. If the seller accepts this offer, she is free to choose her actual level of effort. The higher the level of effort chosen, the more costly to the seller. In each experimental session there are eight sellers and six buyers, each of whom can contract with only a single seller.<sup>183</sup> All participants know that there is an excess supply of sellers. Thus, in principle, the buyers can enforce very low prices and selfish sellers have no incentive to provide any effort above the minimum level. The results, by now predictable, are that many buyers in fact offer quite generous prices, and many sellers respond with greater efforts, substantially above the selfish choice.<sup>184</sup> In the second version of the experiment, the buyers are allowed to impose a sanction (e.g., a monetary fine) if the seller shirks on her effort obligation.<sup>185</sup> Thus, this version in essence adds the dimension of legal enforcement to the incomplete trust contract just described (one might, for example, think of the fine as damages for breach of contract). The results show that the average price offered by buyers and the average effort of sellers is *lower* in the presence of explicit, legally enforceable sanctions. Without legal enforcement, reciprocal fairness generates high levels of performance. But once the interaction is backed by legal sanctions, reciprocity declines and overall perform-

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182. Ernst Fehr & Simon Gächter, Do Incentive Contracts Undermine Voluntary Cooperation? (Inst. for Empirical Research in Econ., Univ. of Zurich, Working Paper No. 34, 2002), available at <http://www.iew.unizh.ch/wp/iewwp34.pdf> (on file with the *Columbia Law Review*) [hereinafter Fehr & Gächter, Incentive Contracts]. See generally Fehr & Gächter, Fairness and Retaliation, *supra* note 113.

183. Experiments have shown that prices and quality of efforts are the same regardless of whether the number of sellers is below or above the number of buyers. This indicates that competition has little or no effect on outcomes in these gift exchange markets. Jordi Brandts & Gary Charney, Do Market Conditions Affect Gift Exchange? Evidence from Experimental Markets with Excess Supply and Excess Demand 14–21, 25 (Instituto de Análisis Económico, Working Paper No. 522.02, Dec. 2001), available at <http://pareto.uab.es/wp/2002/52202.pdf> (on file with the *Columbia Law Review*).

184. In a large field study, Truman Bewley provided empirical evidence supporting the results of the Fehr and Gächter experiments. See Truman F. Bewley, Why Wages Don't Fall During a Recession (1999); Truman F. Bewley, A Depressed Labor Market as Explained by Participants, 85 *Am. Econ. Rev.* 250 (1995). The managers who were interviewed stressed that "workers have so many opportunities to take advantage of employers that it is not wise to depend on coercion and financial incentives alone as motivators." *Id.* at 252. Employers believe that other motivators are necessary, which are best thought of as having to do with generosity. See Fehr & Gächter, Incentive Contracts, *supra* note 182, at 11.

185. The probability of verifying shirking is set at one-third and determined by a roll of the dice. See Fehr & Gächter, Incentive Contracts, *supra* note 182, at 11.

ance is reduced.<sup>186</sup> This result suggests that implicit incentives based on reciprocity and explicit, legally enforceable performance duties may indeed be in conflict with each other.<sup>187</sup> In particular, explicit incentives may “crowd out” behavior based on reciprocal fairness.<sup>188</sup>

The “crowding out” phenomenon observed in the experiments may seem counterintuitive, particularly since other experiments have shown that a combination of self-enforcing incentives actually increases contracting efficiency.<sup>189</sup> Why might reciprocal fairness and repeated interactions be complements while reciprocal fairness and legal enforcement are substitutes? One conjecture is based on the fact that legal enforcement is structured as a zero-sum game in which the promisee threatens *ex ante* to sanction the promisor for subsequent nonperformance. The *explicit, ex ante* nature of legal sanctions may thus undermine the instinct to reciprocate. Fair types may simply regard legal enforcement as unfair since they are willing to reciprocate voluntarily, while selfish types may interpret the threat of sanction through legal enforcement as a signal

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186. The level of effort by sellers and amount of voluntary cooperation were lower in the obligatorily complete contract because: 1) shirking by sellers increased even where the expected costs of shirking exceeded the expected returns to the seller; and 2) reciprocity in the form of generous offers by buyers and reciprocating efforts by sellers vanished almost completely. Where the expected returns to shirking were positive, sellers chose the minimum quality in the vast majority of cases, and, when buyers offered more generous prices above the minimum, sellers did not reciprocate with greater efforts. See Fehr & Gächter, *Incentive Contracts*, *supra* note 182, at 15–18.

187. Other experiments have also found that combining legal enforcement with nonlegal mechanisms—such as social norms—can have counterproductive effects. See, e.g., Iris Bohnet et al., *More Order with Less Law: On Contract Enforcement, Trust, and Crowding*, 95 *Am. Pol. Sci. Rev.* 131, 141 (2001) (demonstrating that in contract enforcement experiment in which probabilities of sanctions for breach are variable, and propensity to perform is nonmonotonic, performance is higher at both low and high probability states and lower at intermediate probabilities of enforcement); Uri Gneezy & Aldo Rustichini, *A Fine Is a Price*, 29 *J. Legal Stud.* 1, 15–16 (2000) (reporting that introduction of price incentives for parents who are late picking up their children from day care increases frequency of late-coming parents). There is also an extensive literature in social psychology that considers the crowding out of intrinsic motivation by extrinsic monetary rewards. See, e.g., Edward L. Deci et al., *A Meta-Analytic Review of Experiments Examining the Effects of Extrinsic Rewards on Intrinsic Motivation*, 125 *Psychol. Bull.* 627 (1999). In this literature the monetary incentive is set exogenously by the experimenter and not by a principal. Thus, it does not test for reciprocity and voluntary cooperation.

188. The experimental research on crowding out is still in a preliminary stage. In particular, economists do not know why and under which conditions reciprocity and voluntary cooperation will be undermined by legal enforcement. Fehr and Gächter have shown that framing effects influence the crowding out phenomenon. Thus, for example, the levels of reciprocity are considerably greater if the explicit incentive is framed as a bonus from a base offer rather than as a fine for nonperformance, even though the economic effects of the “carrot” are equal to that of the “stick.” See Fehr & Gächter, *Incentive Contracts*, *supra* note 182, at 26–30.

189. See *supra* Part III.A.2 (discussing complementarity between reciprocal fairness and repeated interactions).

that the promisee is unlikely to be a reciprocator.<sup>190</sup> The same explicit threat does not exist in the case of repeated interactions where the implicit sanction (terminating the relationship) is imposed *ex post* after the shirking has been observed. In that sense, *ex post* punishment may be perceived as “fairer” than the *ex ante* announcement of damages for breach.

The evidence that voluntary cooperation may be undermined by explicit legal obligations is a further argument in favor of the formalist approach to contract law that has been historically followed by the common law. The instinct to preserve a space for reciprocal fairness may explain the common law preference for simple, binary, winner-take-all legal rules.<sup>191</sup> Within the framework of a few clear rules, parties can respond to implicit opportunities to behave reciprocally, even in one-shot interactions. Obviously, these effects are magnified in relational settings in which parties can “lock in” to a long-term cooperative equilibrium.<sup>192</sup>

Notwithstanding the power of reciprocal fairness, contractual breakdowns nonetheless occur, in part because as the experimental evidence suggests there is both self-interest and reciprocity in the world. But given such a world, the puzzle of indefinite contracts may now be solved. Contracting parties simply may have learned to behave under two sets of rules: an explicit (rigid) set of rules for legal enforcement and an implicit (flexible) set of rules for self-enforcement. It may be that the lesson for courts is that any effort to judicialize preferences for fairness will destroy the very informality that makes reciprocity so effective in the first instance.<sup>193</sup> The experimental evidence suggests that the contemporary academic instinct to have courts fill gaps in incomplete contracts with broadly applicable standards of reasonableness and fair treatment may actually undermine the very norms of fairness that the legal system seeks to advance. If so, it is important that neither courts nor academic commentators generalize about the impotency of reciprocal fairness from the litigated cases, as these disputes only arise when the implicit incentives have broken down. Litigated cases, therefore, give no clue of the power of reciprocal fairness in the many situations where these social prefer-

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190. The story that explains crowding out is based only on intelligent speculation. A legal sanction is always framed as a threat. To the extent that intentions matter in motivating reciprocity, the *ex ante* threat may be interpreted as a hostile intention. A liquidated damages clause in a contract may thus be perceived as an indication of distrust. If sellers perceive the damages clause as a hostile act, they may be less willing to put forth the same quality of efforts as compared to a situation in which the first mover sends a trusting signal. Fehr & Gächter, *Incentive Contracts*, *supra* note 182, at 14.

191. See Robert E. Scott, *A Relational Theory of Default Rules for Commercial Contracts*, 19 *J. Legal Stud.* 597, 611–15 (1990) [hereinafter Scott, *Relational Theory of Default Rules*] (analyzing doctrines of perfect tender, mistake, excuse, and breach as binary legal rules that assign risks on all-or-nothing basis).

192. *Id.* at 614; Scott, *Conflict and Cooperation*, *supra* note 10, at 2026.

193. See Scott, *Relational Theory of Default Rules*, *supra* note 191, at 615 (making the complementary point that judicializing extralegal norms will undermine their effectiveness).

ences may have been effective in enforcing indefinite agreements, even between strangers. Understood in the broader context of a system that relies on *both* legal enforcement and self-enforcement, the wisdom of the common law approach becomes clearer.<sup>194</sup>

### CONCLUSION

The doctrine that declares unenforceable an agreement that is uncertain or indefinite in its material terms is a core principle of the common law of contracts. Conventional academic wisdom holds that this doctrine is an artifact of a discredited legal formalism. It is assumed that contemporary American courts work to enforce incomplete contracts by filling gaps with broad standards of reasonableness and good faith. But in an important class of cases the conventional wisdom is misleading. A systematic review of this case law shows that courts continue to adhere to the indefiniteness doctrine, declining to enforce contracts where the parties have intentionally declined to condition performance on verifiable measures that could have been specified in the agreement at relatively low cost.

This evidence is puzzling in two distinct respects. First, these intentionally incomplete agreements are inconsistent with the assumptions of contract theory that contracting parties will discard nonverifiable measures of performance but will contract over low-cost, verifiable measures. Second, the judicial decisions not to enforce these agreements are inconsistent with the assumption of most contemporary theorists that courts can (and do) enhance the fairness and efficiency of contractual exchange by filling contractual gaps whenever possible.

The alternative of self-enforcement is the most plausible explanation for why parties intentionally write indefinite agreements even in isolated transactions between relative strangers. Where self-enforcement is effective, it is more efficient than legal enforcement. The traditional understanding is that self-enforcement is limited to contexts where reputation or repeated interactions are sufficient to make promises credible. Recent work in experimental economics suggests, however, that reciprocal fairness is a potent additional means of self-enforcement. Whether reciprocal fairness is a learned behavior that derives from the benefits of cooperation in repeated interactions or an intrinsic motivation remains an open question. But the important point is that the evidence suggests that the domain of self-enforcing contracts extends to environments in which a reputation for trustworthiness and the discipline of ongoing relationships are relatively weak forces. Intentionally incomplete contracts of the sort

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194. *Id.* at 614–15. The formal contract law that has survived the common law process serves as an effective complement to the more flexible mechanism of reciprocal fairness. Any effort to expand the law by adopting broad legal standards requiring “reasonable” behavior and/or “fair treatment” may (perversely) crowd out the opportunities for implicit enforcement through reciprocity.

routinely dismissed by courts have a common feature: The agreements are simple in form, clear in commitment, and structured to create opportunities for parties to reciprocate in ways that expand the contractual surplus.<sup>195</sup>

One of the robust findings of the fairness experiments is that we live in a heterogeneous world in which a significant fraction of individuals behave as if they are reciprocally fair and a comparable fraction respond only to self-interest. This phenomenon of heterogeneity provides an explanation for another category of intentionally incomplete agreements. Parties commonly write informal "agreements to agree" (what I have termed "comfort agreements"). Among other purposes, these agreements can function as means of screening for reciprocally fair business partners by providing an opportunity for each party to observe the other's character over time.

Legal analysts have a further concern: Should courts intervene to enforce these indefinite agreements when reciprocity fails? The answer to this legal policy question depends on whether legal enforcement is a complement to, or a substitute for, self-enforcement through reciprocity. The available evidence suggests that legally enforcing these troublesome agreements may be counterproductive. If courts use general standards of fairness to enforce nonverifiable promises, parties will abandon this form of agreement. Even where courts only enforce the verifiable promises in these agreements, there is some evidence that any judicial intervention crowds out the instinct to reciprocate. To the extent this is true, legal enforcement will have negative effects in reducing the potency of reciprocal fairness in the great majority of cases where self-enforcement is currently effective.

The evidence that legal sanctions and voluntary cooperation may be incompatible both explains and justifies the determination of contemporary courts to police strictly the boundary between the two domains. Perhaps the puzzle of deliberately incomplete contracts is only a conundrum for academic lawyers, whose occupational hazard is to assume that without law there is no social order. Contrary to that conventional assumption, there are strong reasons to believe that fairness matters, and because of those reasons the law should leave space for reciprocity to work.

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195. The key features of these agreements—simplicity and moral clarity—may best explain how parties can tell whether they are in a legally enforceable environment, where fairness is crowded out, or a self-enforcing environment, where reciprocity has room to function. Where transactions are complex and the respective promises interrelated, a failure to perform a promise may not be obvious and thus reciprocity may not serve to make the promises credible. Given the highly interactive nature of the obligations of each party to a complex transaction, it may be difficult to know, for example, whether one party's refusal to respond cooperatively in a particular case represents unfair or selfish behavior or an appropriately measured retaliatory response to an earlier instance of noncooperation by the other. These complex interactions are the sorts of agreements that commercial parties typically reduce to legally enforceable obligations. Scott, *Conflict and Cooperation*, *supra* note 10, at 2050–51.

TABLE 1:  
ENFORCEABLE INCOMPLETE CONTRACTS

State	Case Citation	Type of Transaction <sup>196</sup>	Parties <sup>197</sup>
Cal.	Denver D. Darling, Inc. v. Controlled Environments Construction, Inc., 108 Cal. Rptr. 2d 213 (Ct. App. 2001)	Relational	Closely-Held Firm v. Closely-Held Firm
Cal.	Krantz v. BT Visual Images, L.L.C., 107 Cal. Rptr. 2d 209 (Ct. App. 2001)	Relational	Individual v. Large Firm
Conn.	Detroit Institute of Arts Founders Society v. Rose, 127 F. Supp. 2d 117 (D. Conn. 2001)	Relational	Large Firm v. Individual
Conn.	Bartomeli v. Bartomeli, 783 A.2d 1050 (Conn. App. Ct. 2001)	Relational	Individual v. Individual
Conn.	Willow Funding Co. v. Grencom Associates, 779 A.2d 174 (Conn. App. Ct. 2001)	Relational	Large Firm v. Large Firm
D.C.	Howell v. United States, 51 Fed. Cl. 516 (2002)	Relational	Closely-Held Firm v. Large Firm
D.C.	Ace-Federal Reporters, Inc. v. Barram, 226 F.3d 1329 (Fed. Cir. 2000)	Relational	Large Firm v. Large Firm
D.C.	Affordable Elegance Travel, Inc. v. Worldspan, L.P., 774 A.2d 320 (D.C. 2001)	Relational	Large Firm v. Large Firm
Ga.	Quadron Software International Corp. v. Plotseneder, 568 S.E.2d 178 (Ga. Ct. App. 2002)	Relational	Large Firm v. Individual
Ga.	Jones v. Hill, 539 S.E.2d 893 (Ga. Ct. App. 2000)	Relational	Individual v. Individual
Ga.	Kueffer Crane & Hoist Service, Inc. v. Passarella, 543 S.E.2d 113 (Ga. Ct. App. 2000)	Relational	Large Firm v. Individual
Ga.	Tattersall Club Corp. v. White, 501 S.E.2d 851 (Ga. Ct. App. 1998)	Relational	Large Firm v. Individual
Idaho	Kohring v. Robertson, 44 P.3d 1149 (Idaho 2002)	Relational	Individual v. Closely-Held Firm
Idaho	General Auto Parts Co. v. Genuine Parts Co., 979 P.2d 1207 (Idaho 1999)	Relational	Large Firm v. Large Firm
Ill.	Raskas Foods, Inc. v. Southwest Whey, Inc., 978 S.W.2d 46 (Mo. Ct. App. 1998)	Relational	Large Firm v. Large Firm

196. Transactions are characterized as either relational or discrete indicating the extent to which the parties are (or were) in ongoing relationships rather than isolated or one-shot exchange transactions.

197. Parties are coded as either individuals, closely-held firms (e.g., sole proprietorships, most partnerships, and closely-held corporations) or large firms (e.g., public corporations, limited partnerships, and professional partnerships).

TABLE 1 (CONT'D):  
ENFORCEABLE INCOMPLETE CONTRACTS

State	Case Citation	Type of Transaction	Parties
Ind.	McLinden v. Coco, 765 N.E.2d 606 (Ind. Ct. App. 2002)	Relational	Closely-Held Firm v. Closely-Held Firm
Iowa	Helm Financial Corp. v. Iowa Northern Railway, Co., 214 F. Supp. 2d 934 (N.D. Iowa 2002)	Relational	Large Firm v. Large Firm
Iowa	Gallagher, Langlas & Gallagher v. Burco, 587 N.W.2d 615 (Iowa Ct. App. 1998)	Relational	Large Firm v. Individual
Md.	Giannaris v. Cheng, 219 F. Supp. 2d 687 (D. Md. 2002)	Relational	Individual v. Individual
Md.	Lacy v. Arvin, 780 A.2d 1180 (Md. Ct. Spec. App. 2001)	Relational	Individual v. Individual
Mass.	Swartz v. Schering-Plough Corp., 53 F. Supp. 2d 95 (D. Mass. 1999)	Relational	Individual v. Large Firm
Mo.	American Laminates, Inc. v. J.S. Latta Co., 980 S.W.2d 12 (Mo. Ct. App. 1998)	Relational	Large Firm v. Large Firm
N.J.	D & N Property Management & Development Corp. v. Copeland Cos., 127 F. Supp. 2d 456 (S.D.N.Y. 2001)	Relational	Large Firm v. Large Firm
N.Y.	Gonzalez v. Don King Productions, Inc., 17 F. Supp. 2d 313 (S.D.N.Y. 1998)	Relational	Individual v. Closely-Held Firm
N.Y.	Non-Linear Trading Co. v. Braddis Associates, Inc., 675 N.Y.S.2d 5 (App. Div. 1998)	Relational	Large Firm v. Large Firm
Ohio	DeBoer Structures (U.S.A.) Inc. v. Shaffer Tent & Awning Co., 233 F. Supp. 2d 934 (S.D. Ohio 2002)	Relational	Large Firm v. Large Firm
Ohio	Nilavar v. Osborn, 738 N.E.2d 1271 (Ohio Ct. App. 2000)	Relational	Individual v. Individual
Ohio	Vargo v. Clark, 716 N.E.2d 238 (Ohio Ct. App. 1998)	Relational	Individual v. Individual
Okla.	McCurdy Group, L.L.C. v. American Biomedical Group, Inc., 9 Fed. Appx. 822 (10th Cir. 2001)	Relational	Large Firm v. Large Firm
Pa.	ATACS Corp. v. Trans World Communications, Inc., 155 F.3d 659 (3d Cir. 1998)	Relational	Large Firm v. Large Firm
Tenn.	Davidson v. Holtzman, 47 S.W.3d 445 (Tenn. Ct. App. 2000)	Relational	Individual v. Individual
Tex.	Herrmann Holdings Ltd. v. Lucent Technologies, Inc., 302 F.3d 552 (5th Cir. 2002)	Relational	Large Firm v. Large Firm
Tex.	Esquenazi v. Sardar, No. DV98-07269-E, 2002 WL 519684 (Tex. Ct. App. Apr. 8, 2002)	Relational	Large Firm v. Individual
V.I.	Morton v. Hewitt, 202 F. Supp. 2d 394 (D.V.I. 2002)	Relational	Individual v. Individual



TABLE 2:  
UNENFORCEABLE INDEFINITE AGREEMENTS<sup>198</sup>

State	Case Citation	Type of Transaction	Parties	Type of Agreement
Cal.	<i>Halvorsen v. Aramark Uniform Services, Inc.</i> , 77 Cal. Rptr. 2d 383 (Ct. App. 1998)	Relational	Individual v. Large Firm	Indefinite bonus contract
Conn.	<i>Suffield Development Associates v. Society for Savings</i> , 708 A.2d 1361 (Conn. 1998)	Discrete	Large Firm v. Large Firm	Comfort agreement
Conn.	<i>111 Whitney Ave., Inc. v. Commissioner of Mental Retardation</i> , 802 A.2d 117 (Conn. App. Ct. 2002)	Discrete	Closely-Held Firm v. Large Firm	Indefinite bonus contract
Conn.	<i>Coady v. Martin</i> , 784 A.2d 897 (Conn. App. Ct. 2001)	Discrete	Individual v. Individual	Comfort agreement
Colo.	<i>National Mortgage Corp. v. Greenwich Capital Financial Products, Inc.</i> , 53 Fed. Appx. 510 (10th Cir. 2002)	Relational	Large Firm v. Large Firm	Deliberately incomplete (end-game)
Colo.	<i>DiFrancesco v. Particle Interconnect Corp.</i> , 39 P.3d 1243 (Colo. Ct. App. 2001)	Relational	Closely-Held Firm v. Large Firm	Agreement to agree (settlement)
Fla.	<i>University Creek Associates II, Ltd. v. Boston American Financial Group, Inc.</i> , 100 F. Supp. 2d 1337 (S.D. Fla. 1998)	Discrete	Large Firm v. Large Firm	Comfort agreement
Fla.	<i>Bergman v. Delulio</i> , 826 So. 2d 500 (Fla. Dist. Ct. App. 2002)	Discrete	Individual v. Individual	Comfort agreement
Ga.	<i>OfficeMax, Inc. v. Sapp</i> , 132 F. Supp. 2d 1079 (M.D. Ga. 2001)	Discrete	Large Firm v. Closely-Held Firm	Letter of intent
Ga.	<i>Zurich American Insurance Co. v. General Car &amp; Truck Leasing System, Inc.</i> , 574 S.E.2d 914 (Ga. Ct. App. 2002)	Discrete	Large Firm v. Large Firm	Inadvertence
Ga.	<i>Aukerman v. Witmer</i> , 568 S.E.2d 123 (Ga. Ct. App. 2002)	Relational	Individual v. Individual	Deliberately incomplete
Ga.	<i>Bulloch South, Inc. v. Gosai</i> , 550 S.E.2d 750 (Ga. Ct. App. 2001)	Discrete	Closely-Held Firm v. Individual	Inadvertence
Ga.	<i>Burns v. Dees</i> , 557 S.E.2d 32 (Ga. Ct. App. 2001)	Relational	Individual v. Individual	Indefinite bonus contract

198. Cases are coded by state, type of transaction, and nature of parties as in table 1. In addition, the cases are coded by "Type of Agreement": inadvertently incomplete agreement, deliberately incomplete agreement, indefinite bonus agreement, general agreement to agree, comfort agreement, formal letter of intent, sales contract, and indefinite non-compete clause.

TABLE 2 (CONT'D):  
UNENFORCEABLE INDEFINITE AGREEMENTS

State	Case Citation	Type of Transaction	Parties	Type of Agreement
Ga.	Mooney v. Mooney, 538 S.E.2d 864 (Ga. Ct. App. 2000)	Discrete	Individual v. Individual	Indefinite bonus contract
Ga.	Faulkner v. Hood, 539 S.E.2d 886 (Ga. Ct. App. 2000)	Discrete	Individual v. Individual	Indefinite bonus contract
Ga.	Gill v. B & R International, Inc., 507 S.E.2d 477 (Ga. Ct. App. 1998)	Relational	Individual v. Large Firm	Indefinite bonus contract
Ill.	Brines v. XTRA Corp., 304 F.3d 699 (7th Cir. 2002)	Relational	Individual v. Large Firm	Deliberately incomplete
Ill.	Wilkes v. AccuStaff, Inc., 42 F. Supp. 2d 842 (N.D. Ill. 1999)	Relational	Individual v. Large Firm	Indefinite bonus contract
Ind.	Mays v. Trump Indiana, Inc., 255 F.3d 351 (7th Cir. 2001)	Discrete	Individual v. Large Firm	Agreement to agree
Ind.	Don Webster Co. v. Indiana Western Express, Inc., 161 F. Supp. 2d 959 (S.D. Ind. 2001)	Relational	Large Firm v. Large Firm	Indefinite bonus contract
Iowa	Schaller Telephone Co. v. Golden Sky Systems, Inc., 298 F.3d 736 (8th Cir. 2002)	Discrete	Large Firm v. Large Firm	Agreement to agree
Kan.	Sprint Corp. v. DeAngelo, 12 F. Supp. 2d 1188 (D. Kan. 1998)	Discrete	Large Firm v. Individual	Indefinite non-compete clause
Ky.	Auto Channel, Inc. v. Speedvision Network, LLC, 144 F. Supp. 2d 784 (W.D. Ky. 2001)	Discrete	Closely-Held Firm v. Large Firm	Agreement to agree
Me.	Larson v. Johnson, 184 F. Supp. 2d 26 (D. Me. 2002) <sup>199</sup>	Relational	Individual v. Individual	Indefinite bonus contract
Md.	Doe v. Doe, 712 A.2d 132 (Md. Ct. Spec. App. 1998)	Relational	Individual v. Individual	Indefinite bonus contract
Minn.	Richie Co. v. Lyndon Insurance Group, Inc., 316 F.3d 758 (8th Cir. 2002)	Relational	Closely-Held Firm v. Closely-Held Firm	Comfort agreement
Miss.	Hunt v. Coker, 741 So. 2d 1011 (Miss. Ct. App. 1999)	Discrete	Individual v. Individual	Comfort agreement
Mo.	Smith v. Hammons, 63 S.W.3d 320 (Mo. Ct. App. 2002)	Discrete	Individual v. Individual	Indefinite bonus contract
Neb.	Cheloha v. Cheloha, 582 N.W.2d 291 (Neb. 1998)	Discrete	Individual v. Individual	Indefinite bonus contract
N.Y.	Jalor Color Graphics, Inc. v. Knoll Pharmaceutical Co., 26 Fed. Appx. 38 (2d Cir. 2001)	Relational	Large Firm v. Large Firm	Indefinite bonus contract

199. Summary judgment for defendant was denied on the grounds that plaintiff's claim for wages at his earlier rate presented a jury question.

TABLE 2 (CONT'D):  
UNENFORCEABLE INDEFINITE AGREEMENTS

State	Case Citation	Type of Transaction	Parties	Type of Agreement
N.Y.	Wechsler v. Hunt Health Systems, Ltd., 186 F. Supp. 2d 402 (S.D.N.Y. 2002)	Discrete	Large Firm v. Large Firm	Deliberately incomplete
N.Y.	Missigman v. USI Northeast, Inc., 131 F. Supp. 2d 495 (S.D.N.Y. 2001)	Relational	Individual v. Large Firm	Agreement to agree
N.Y.	Sugerman v. MCY Music World, Inc., 158 F. Supp. 2d 316 (S.D.N.Y. 2001)	Discrete	Individual v. Closely-Held Firm	Indefinite bonus contract
N.Y.	Gorodensky v. Mitsubishi Pulp Sales (MC), Inc., 92 F. Supp. 2d 249 (S.D.N.Y. 2000)	Discrete	Large Firm v. Large Firm	Letter of intent
N.Y.	Cleveland Wrecking Co. v. Hercules Construction Corp., 23 F. Supp. 2d 287 (E.D.N.Y. 1998)	Discrete	Closely-Held Firm v. Closely-Held Firm	Agreement to agree
N.Y.	Lowinger v. Lowinger, 733 N.Y.S.2d 33 (App. Div. 2001)	Relational	Individual v. Individual	Indefinite bonus contract
N.Y.	F & K Supply, Inc. v. Willowbrook Development Co., 732 N.Y.S.2d 734 (App. Div. 2001)	Discrete	Closely-Held Firm v. Closely-Held Firm	Settlement agreement
N.Y.	Robert Plan Corp. v. Perot Systems Corp., 718 N.Y.S.2d 50 (App. Div. 2000)	Discrete	Closely-Held Firm v. Individual	Deliberately incomplete
N.Y.	Strauss Paper Co. v. RSA Executive Search, Inc., 688 N.Y.S.2d 641 (App. Div. 1999)	Discrete	Large Firm v. Large Firm	Inadvertence
N.C.	Miller v. Rose, 532 S.E.2d 228 (N.C. Ct. App. 2000)	Discrete	Individual v. Individual	Comfort agreement
N.D.	Stout v. Fisher Industries, Inc., 603 N.W.2d 52 (N.D. 1999)	Discrete	Individual v. Closely-Held Firm	Comfort agreement
Ohio	Ullmo ex rel. Ullmo v. Gilmour Academy, 273 F.3d 671 (6th Cir. 2001)	Discrete	Individual v. Closely-Held Firm	Deliberately incomplete
Ohio	Kostelnik v. Helper, 770 N.E.2d 58 (Ohio 2002)	Discrete	Individual v. Individual	Inadvertence
Ohio	Allied Erecting & Dismantling Co. v. Uneco Realty Co., 765 N.E.2d 420 (Ohio Ct. App. 2001)	Discrete	Closely-Held Firm v. Closely-Held Firm	Indefinite bonus contract
Okla.	Vice v. Conoco, Inc., 150 F.3d 1286 (10th Cir. 1998)	Relational	Individual v. Large Firm	Indefinite bonus contract
Pa.	Aircraft Guaranty Corp. v. Strato-Lift, Inc., 103 F. Supp. 2d 830 (E.D. Pa. 2000)	Discrete	Large Firm v. Large Firm	Sales contract
S.D.	Estate of Fisher v. Fisher, 645 N.W.2d 841 (S.D. 2002)	Relational	Individual v. Individual	Comfort agreement

TABLE 2 (CONT'D):  
UNENFORCEABLE INDEFINITE AGREEMENTS

State	Case Citation	Type of Transaction	Parties	Type of Agreement
Tenn.	Doe v. HCA Health Services of Tennessee, Inc., 46 S.W.3d 191 (Tenn. 2001)	Discrete	Individual v. Large Firm	Deliberately Incomplete
Tex.	In re United States Brass Corp., 277 B.R. 326 (Bankr. E.D. Tex. 2002)	Discrete	Individual v. Large Firm	Inadvertence
Tex.	Fort Worth Independent School District v. City of Fort Worth, 22 S.W.3d 831 (Tex. 2000)	Relational	Large Firm v. Large Firm	Comfort agreement
Tex.	Oakrock Exploration Co. v. Killam, 87 S.W.3d 685 (Tex. Ct. App. 2002)	Discrete	Closely-Held Firm v. Individual	Agreement to agree
Tex.	John Wood Group USA, Inc. v. ICO, Inc., 26 S.W.3d 12 (Tex. Ct. App. 2000)	Discrete	Large Firm v. Large Firm	Letter of intent
Utah	Homestead Golf Club, Inc. v. Pride Stables, 224 F.3d 1195 (10th Cir. 2000)	Discrete	Large Firm v. Closely-Held Firm	Comfort agreement
Va.	Beazer Homes Corp. v. VMIF/Anden Southbridge Venture, 235 F. Supp. 2d 485 (E.D. Va. 2002)	Discrete	Closely-Held Firm v. Individual	Letter of intent
Wis.	Chirichillo v. Prasser, 30 F. Supp. 2d 1132 (E.D. Wis. 1998)	Discrete	Individual v. Individual	Indefinite bonus contract