Precontractual Liability and Preliminary Agreements

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ARTICLES

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PRECONTRACTUAL LIABILITY
AND PRELIMINARY AGREEMENTS

Alan Schwartz* & Robert E. Scott**

For decades, there has been substantial uncertainty regarding when the law will impose precontractual liability. The confusion is partly due to scholars' failure to recover the law in action governing precontractual liability issues. In this Article, Professors Schwartz and Scott show first that no liability attaches for representations made during preliminary negotiations. Courts have divided, however, over the question of liability when parties make reliance investments following a “preliminary agreement.” A number of modern courts impose a duty to bargain in good faith on the party wishing to exit such an agreement. Substantial uncertainty remains, however, regarding when this duty attaches and what the duty entails. Professors Schwartz and Scott develop a model showing that parties create preliminary agreements rather than complete contracts when their project can take a number of forms and the parties are unsure which form will maximize profits. A preliminary agreement allocates investment tasks between the parties, specifies investment timing, and commits the parties only to pursue a profitable project. Parties sink costs in the project because investment accelerates the realization of returns and illuminates whether any of the possible project types would be profitable to pursue. A party to a preliminary agreement “breaches” when it delays its investment beyond the time the agreement specifies. Delay will save costs for this party if no project turns out to be profitable and will improve this party's bargaining power in any negotiation to a complete contract. Delay often disadvantages the promisee, and when parties anticipate such strategic behavior, they are less likely to make preliminary agreements. This disincentive is unfortunate because a preliminary agreement often is a necessary condition to the realization of a socially efficient opportunity. Thus, contract law should encourage relation-specific investments in preliminary agreements by awarding the promisee his verifiable reliance if the promisor has strategically delayed investment. Professors Schwartz and Scott study a large sample of appellate cases showing that: (1) parties appear to make the preliminary agreements described in the model and breach for the reasons the model identifies, and (2) courts sometimes protect the promisee's reliance interest when they should, but the courts' imperfect understanding of the parties' behavior sometimes leads them to err.

I. INTRODUCTION

For at least fifty years, a particular pattern of commercial behavior has engendered considerable litigation and substantial scholarly commentary. Two commercial parties agree to attempt a transaction

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and agree also on the nature of their respective contributions, but nei-
ther the transaction nor what the parties are to do is precisely de-
scribed, and neither may be written down. The parties do not agree
and, indeed, may never have attempted to agree on important terms
such as the price. After the parties agree upon what they can, and be-
fore uncertainty is resolved, one or both of them make a sunk-cost in-
vestment. This pattern of commercial behavior suggests that the par-
ties have made a "preliminary agreement" that will have one of two
legally significant outcomes: If the transaction turns out to be profit-
able after uncertainty is resolved, the parties will make their agree-
ment more concrete and then conduct the transaction. But if the
transaction turns out to be unprofitable, the parties will abandon the
project. Disputes sometimes arise under these preliminary agreements
after one or both of the parties have invested. One party may then
abandon the project even though the other party protests the first
party's exit. In particular, the disappointed party believes that he is
entitled to compensation either for his expectation or for his invest-
ment cost while the other party believes that she is entitled to exit
without liability. A court must then decide whether to protect the
promisee's expectation interest, or to protect his reliance interest by
reimbursing his sunk cost, or to award him nothing.

Legal scholars and practicing lawyers have poorly understood these
types of cases. This is partly because the legal doctrines invoked in
preliminary agreement cases are also used to support unrelated claims
of precontractual liability. As a consequence, the governing criteria
when reliance on a preliminary agreement is an issue have been ob-

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1 A sunk-cost or relation-specific investment is one that is partly or totally nonredeployable. For example, steel rods ordered for a project are redeployable because a party can sell them on the market, whereas rods that are fabricated into particular shapes would not be redeployable if the shapes were specific to the contracting party's needs.

2 For convenience, we refer to the party who seeks damages or seeks to continue the deal as the promisee.

3 The legal rules that have evolved to treat claims of precontractual liability travel under a confusing array of legal doctrines. Courts are typically asked to protect the promisee's reliance on the enforceability of an incomplete bargain against the alleged promisor's insistence that no con-
tract had been made. The promisee typically invokes multiple grounds for relief, including mis-
representation, unjust enrichment, promissory estoppel, implied contract, and breach of an obliga-
tion to bargain in good faith. These arguments often, but not always, fail. Traditional scholars
ask whether courts correctly apply the various legal doctrines on which promisees base their
claims for relief. See, e.g., E. Allan Farnsworth, Precontractual Liability and Preliminary Agree-
and economics scholars ask whether it would be efficient to award damages to the promisee. See,
e.g., Lucian Arye Bebchuk & Omri Ben-Shahar, Precontractual Reliance, 30 J. LEGAL STUD. 423
(2001); 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 Con-
tract Formation, 85 VA. L. REV. 385 (1999); Avery Katz, When Should an Offer Stick? The Eco-
secured. The first task, therefore, is to characterize more precisely the commercial patterns and the associated legal rules that control precontractual liability.

Parties have made a "fully binding contract" when they have agreed on all material terms and memorialized their agreement in a final written document. If the parties have not yet reached a fully binding contract, their negotiations will fall into one of three categories. First, the parties have engaged in "preliminary negotiations" when they have discussed a deal but have not agreed to one. In this event, the disappointed party can recover nothing. Second, the parties have agreed on all material terms and intend to memorialize this agreement in a formal document. In the interval between agreement and memorialization, the promisor has had a change of heart. Courts treat this type of agreement as a fully binding contract when the evidence supports a finding that the parties did not intend the formalization of their agreement to be essential. As is usual with binding contracts, courts protect the promisee's expectation interest. Third, the parties have made a preliminary agreement as defined above when they have agreed on certain terms but left other terms open, so that the best inference from their negotiations is that they have made a binding preliminary commitment to pursue a profitable transaction. Here, the emerging legal rule requires parties to such preliminary agreements to bargain in good faith over open terms. Should the promisor — the party who prefers to exit — fail to bargain in good faith, she will be

4 In the absence of sufficient evidence that the parties intended to be legally bound in some way, courts generally conclude that the parties have engaged merely in preliminary negotiations and do not impose liability for inducing reliance absent misrepresentation, express promise, or similar inducement. For a recent example, see PFT Roberson, Inc. v. Volvo Trucks North America, Inc., 420 F.3d 728 (7th Cir. 2005).

5 See, e.g., Adjudistrate Sys., Inc. v. GAB Bus. Servs., Inc., 145 F.3d 543, 547–48 (2d Cir. 1998); Gorodensky v. Mitsubishi Pulp Sales (MC) Inc., 92 F. Supp. 2d 249, 254–55 (S.D.N.Y. 2000). Disputes in which the parties agreed on all material terms but also agreed later to memorialize their agreement in a more formal document arise primarily because parties failed to express clearly their intention regarding when their arrangement would become legally enforceable.


7 This rule originated with the opinion of Judge Leval in Tribune. Currently, Judge Leval's framework is followed in at least thirteen states, sixteen federal district courts, and seven federal circuits. See infra notes 76–80 and accompanying text. As for other countries, England does not award any remedy before a complete contract has been made. It is more common to impose a duty of good faith in conducting negotiations or, as in France, to regulate precontractual behavior under the law of torts. Liability for costs incurred is sometimes awarded under these rules, but apart from easy and unusual cases, such as when a party enters into negotiations and has no intention of making a contract, foreign law seems as uncertain and in need of guidance as U.S. law. For discussions of foreign precontractual liability regimes, see PRECONTRACTUAL LIABILITY (Ewoud H. Hondius ed., 1991), and Paula Giliker, A Role for Tort in Pre-Contractual Negotiations? An Examination of English, French, and Canadian Law, 52 INT'L & COMP. L.Q. 969 (2003).
liable for the promisee's reliance expenditures. The parties are not required to agree to a deal, however, because their preliminary agreement does not commit them to pursue an unprofitable project.

In this Article, we ask whether the new rule governing these binding preliminary commitments is justifiable. This normative question is unresolved because the positive question — why parties engage in these transactions — is also unresolved. A decisionmaker cannot regulate a transaction intelligently without understanding why parties engage in the transaction. The behavioral pattern that is reflected in these preliminary agreements has never been plausibly explained. There are three open questions that must be answered. First, parties often write complete contracts — or contracts that are as complete as they can write — before they make relation-specific investments. Why do parties in this context make preliminary agreements? Second, although it sometimes is infeasible for parties to write a complete contract at the beginning of their relationship, it does not follow that they must sink costs in what may turn out to be an unprofitable venture. A common alternative is to delay contracting until the ex post state of the world becomes clear. Why do these parties invest after making the preliminary agreement but before uncertainty is resolved? Third, parties would not invest in this interval unless the expected value of investment were positive. However, investments are sunk when uncertainty dissipates, so the fact of investment will not cause the parties to pursue a deal that will lose money. If both parties realize that exit is best, how, then, can one of them have a reasonable expectation that the other will reimburse his sunk costs in the absence of a specific promise?

Our Article is the first to address these three questions as a set.

Parties make a preliminary agreement because they cannot write a complete contract at the outset: they function in a complex environment in which a profitable project can take a number of forms, and just which form will work, if any, is unknown at the start. The parties

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8 Litigated preliminary agreements do not settle the issue of reimbursement for sunk costs when deals are abandoned.

9 In his interesting article, Avery Katz posits that parties rely early because the value of a contemplated project declines over time, but the parties do not contract because an exogenous event, such as an unexpected increase in production costs, makes contracting infeasible or uneconomical. See Katz, supra note 3, at 1267–68, 1292. The parties, however, could have written a force majeure clause that would regulate their affairs if the event occurs. Also, Professor Katz implicitly assumes that reliance is verifiable to a court; otherwise, a court could not protect the promisee's reliance interest. But if parties expect that reliance will be verifiable, they can contract on reliance initially: that is, the promisor can purchase the promisee's investment by agreeing to compensate him if a deal turns out to be impossible. In Lucian Bebchuk and Omri Ben-Shahar's model, reliance also is verifiable, see Bebchuk & Ben-Shahar, supra note 3, at 436; therefore, the parties also can contract on reliance initially. Moreover, their model does not explain why the parties rely before uncertainty is resolved.
invest in the interim period because early investment accelerates the realization of returns. The sooner the widget factory is built, the earlier profits will be realized. More importantly, investment clarifies what type of project could succeed. For example, an investment in learning market conditions may reveal which type of widget is likely to sell. Thus, time reveals the state of the world in which any project must be pursued, and investment provides increased knowledge about a project's prospects. This combination makes a profitable project sufficiently tangible to support a complete contract. Preliminary agreements thus commonly are exploratory; that is, the performance of a preliminary agreement sometimes is a necessary condition for parties to pursue an efficient project later.¹⁰

To illustrate how a promisee can have a justifiable grievance, we later show that in some deals expected surplus would be maximized if the parties invested sequentially, while in other deals surplus would be maximized if the parties invested simultaneously.⁵ An efficient preliminary agreement to invest simultaneously may be unstable, however. The promisor has an incentive to defect from any such agreement by delaying her decision whether to invest until after the promisee has invested. The promisor benefits from defection if the project turns out to be unprofitable because she will not have sunk costs in a losing deal. Alternatively, if the project turns out to be profitable, the parties' complete contract will compensate the promisor for the investment costs the project requires her to make, but the contract will not reimburse the promisee for costs he already incurred.¹² Defection from a preliminary agreement to invest simultaneously thus disadvantages the promisee. We therefore characterize a promisor's de-

¹⁰ The model we analyze thus attempts to answer, in the context of preliminary agreements, an important contract theory question: “What can contracts achieve when actions are contractable ex post but not ex ante, especially in ‘complex’ environments?” PATRICK BOLTON & MATHIAS DEWATRIPONT, CONTRACT THEORY 572 (2005).

¹¹ The phrases “simultaneous investment” and “sequential investment” are partly metaphoric. The model applies whenever both parties' investments are needed to make a project successful but one of the parties has a greater ability than the other to delay a material portion of her work.

¹² After the promisee's investment is sunk and the parties learn that the project will be successful, they will bargain to divide the expected gains from the project. At this point, if the promisor refuses to pay for the promisee's costs, the promisee's options are to exit and receive none of his costs, or to accept a share of the expected gain and thus recover some or all of them. The promisee's threat to exit unless his investment costs are reimbursed is not credible, however. The promisor will recognize that it would be irrational for the promisee to exit, and so she will refuse to pay for the sunk investment costs. In contrast, the promisor has a credible threat to exit unless the bargain compensates her for costs she has yet to incur. If she exits, her payoff will be zero rather than the negative sum of her uncompensated costs. Thus, the ex post bargain, when the promisee invests first, will reimburse only the promisor's costs. We develop the implications of this conclusion in the model below.
fection as a breach, and promisees can reasonably expect their promisors not to breach.

It is efficient for contract law to protect the promisee's reliance interest if his promisor deviated from an agreed investment sequence. A reliance recovery will encourage parties to make preliminary agreements and will deter some strategic behavior. Therefore, the new rule governing preliminary agreements — awarding the promisee reliance if the promisor fails to bargain in good faith but not requiring the parties to agree — is a step in the right direction. The law cannot protect the promisee's expectation interest because, in the context that we study, there is no complete contract to enforce.

The new legal rule is deficient, however, because it is unnecessary to require parties to bargain in good faith. As we show, efficiency would be enhanced if the law were simply to protect the promisee's reliance interest. Further, even if the duty to bargain is thought to be justifiable, the cases do not indicate what the parties should bargain about. Rational parties will pursue efficient projects and abandon inefficient projects. They will disagree, if at all, over whether a party should be compensated for a reliance expense. If they disagree, they may call upon a court to resolve the dispute, and it should determine whether a promise to invest simultaneously has been breached and, if so, what fraction of the injured party's reliance should be reimbursed.

The Article proceeds as follows. In Part II, we examine a sample of cases involving early reliance investments in order to recover the law in action regarding precontractual liability. This Part shows that courts require some mutual intent to be bound before awarding any damages. Part III presents a model of the commercial pattern described above. We show how the model answers the three positive

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13 Sunk costs, we argue below, often become more tangible as projects proceed, and thus a portion of the promisee's reliance becomes verifiable.
14 Since these disputes arise when one party refuses to proceed following a preliminary agreement, complete contracts do not exist in the appellate cases. See infra pp. 691-93.
15 A promisor's refusal to discuss whether the parties should transact should not be a violation of the duty to bargain in good faith because the parties will transact when they ought to and will not transact otherwise. Further, as we discuss in section II.B, the cases are unclear regarding when parties have made a preliminary agreement. We argue in section III.D that a binding preliminary commitment should be found when the parties have agreed in broad terms on engaging in a joint project; have divided the investment tasks, although on a high level of abstraction (for example, a division of tasks according to which John will prepare a construction site and Mary will locate a supplier); and, most importantly, have agreed on the rough order in which their investments are to be made. This third requirement serves two functions. First, the promisor should not be held liable for delaying her investment unless the parties had agreed to invest simultaneously. Hence, a court must be able to recover the parties' agreement regarding the timing of planned investments. Second, an agreement on the timing of investment is a good proxy for an intention to be legally bound: parties are unlikely to go so far if they have no such intention.
questions, and we formally derive the normative implications just summarized. Part IV compares the model with a sample of the leading cases in order to evaluate the fit between our results and the commercial patterns revealed in court opinions and to consider how our normative recommendations could have been applied. Part V concludes and briefly highlights our principal result: courts can facilitate commercial behavior not only by enforcing complete contracts, but also by attaching legal significance to preliminary agreements.

II. RECOVERING THE LAW OF PRELIMINARY AGREEMENTS

A. Rethinking the Conventional Understanding of Precontractual Liability

The conventional wisdom among contemporary scholars is that courts will sometimes impose liability for reliance investments undertaken before any agreement between the parties. Commentators identify as grounds for such enforcement the existence of unjust enrichment, misrepresentations made during negotiation, a specific promise made and relied upon during the negotiation process, and a "general obligation arising out of the negotiations themselves." But even a casual survey of contemporary case law casts significant doubt on the accuracy of this conventional view. Courts actually make some form of agreement a necessary condition to a promisee's recovery. For courts, the real issues are when an agreement will be found and how the nature of the agreement will determine the type of damages a promisee can recover.

Much of the confusion can be traced to the frequently taught case of Hoffman v. Red Owl Stores, Inc. Hoffman and Red Owl engaged in extensive negotiations and preparations aimed at Hoffman's opening a Red Owl franchise. In the course of these negotiations, Red Owl officials recommended that Hoffman take numerous financial and

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16 See, e.g., RESTATEMENT (SECOND) OF CONTRACTS § 205 cmt. c (1981) ("Bad faith in negotiation . . . may be subject to sanctions."); RALPH B. LAKE & UGO DRAETTA, LETTERS OF INTENT AND OTHER PRECONTRACTUAL DOCUMENTS 177 (2d ed. 1994) ("Liability for action during the precontractual stage of a transaction may be based on the obligation to bargain and to negotiate in good faith."); Farnsworth, supra note 3, at 222 ("[C]ourts have shown increasing willingness to impose precontractual liability. . . . [U]njust enrichment resulting from the negotiations, misrepresentation made during the negotiations, and specific promise[s] during the negotiations, have been recognized by courts . . ."); Michael B. Metzger & Michael J. Phillips, The Emergence of Promissory Estoppel as an Independent Theory of Recovery, 35 RUTGERS L. REV. 472, 496 (1983) ("It is clear that promissory estoppel has been used to enforce promises too indefinite or incomplete to constitute valid offers.").

17 Farnsworth, supra note 3, at 222; see also, e.g., id. at 229–43 (discussing these four bases for liability in detail).

18 133 N.W.2d 267 (Wis. 1965).
nonfinancial actions. He followed these recommendations because the officials also assured him that $18,000 would be a sufficient capital investment.19 Thereafter, Red Owl developed several financing proposals, the last of which required Hoffman to contribute $34,000 of debt and equity. In response, Hoffman broke off negotiations and sued Red Owl to recover his sunk costs.20 The court held as a matter of law that the parties never reached agreement on essential factors necessary to establish a contract. For example, they had not agreed on any of the details concerning Red Owl’s investment, such as the size, cost, design, and layout of the store, nor had the parties agreed on the terms of the lease, including rent, maintenance, renewal, and franchisee purchase options.21 Indeed, the parties never agreed on just what was meant by the statement that $18,000 of capital would be a sufficient investment to sustain a franchise.22 Thus, the court held, there could be no basis-of-the-bargain liability. Nevertheless, the court permitted Hoffman to recover sunk costs based on the doctrine of promissory estoppel.23 The court held that under this doctrine, a promise — here Red Owl’s assurances that $18,000 was a sufficient investment — need not be as definite in its terms as a promise that is the basis of a traditional bargain contract.24

There is scant support in the law of contracts for this legal analysis. To the contrary, the Restatement of Contracts has only one definition

19 See id. at 268–69.
20 See id. at 270–71.
21 See id. at 274.
22 The trial transcript in the Hoffman case shows that the parties’ minds never met regarding the nature of the $18,000 that Hoffman was prepared to contribute. Red Owl assumed that the $18,000 would be equity and would be exclusive of any debt Hoffman might need to incur to sustain operations at the outset of the new franchise. Hoffman assumed, however, that $18,000 would be his total contribution of equity and debt combined. The Wisconsin Supreme Court did not refer to this misunderstanding about the nature of the $18,000 investment. For further discussion and an analysis of the Hoffman case itself, see Robert E. Scott, Hoffman v. Red Owl Stores and the Myth of Precontractual Reliance, 68 OHIO ST. L.J. (forthcoming 2007) (on file with the Harvard Law School Library), reprinted in CONTRACTS STORIES (Douglas G. Baird ed., forthcoming 2007).
23 See Hoffman, 133 N.W.2d at 274–75. The court based its decision on section 90 of the first Restatement of Contracts. The differences between the first and second Restatement versions of section 90 are irrelevant to the question posed here: whether promissory estoppel can properly be invoked to enforce a preliminary representation that does not qualify as a specific promise.
24 See id. at 275. Specifically, the court held:

If promissory estoppel were to be limited to only those situations where the promise giving rise to the cause of action must be so definite with respect to all details that a contract would result were the promise supported by consideration, then the defendants’ instant promises to Hoffman would not meet this test. However, [section 90 of the Restatement] does not impose the requirement that the promise giving rise to the cause of action must be so comprehensive in scope as to meet the requirements of an offer that would ripen into a contract if accepted by the promisee.

Id.
of a promise, and that definition applies equally to a promise that is the product of a bargained-for exchange and a promise for which enforcement is sought on the grounds of induced reliance.\(^2\) Thus, if *Hoffman* stands for the proposition that a commitment can be binding under a theory of promissory estoppel even though it lacks the clarity and certainty required of a bargained-for promise, the case is wrong as a matter of doctrine.\(^2\) More importantly, it is an outlier: the case has not been followed in its own or other jurisdictions.\(^2\) For example, a recent case applying the Wisconsin law that governed *Hoffman* refused

\(^{25}\) The *Restatement* defines a promise as "a manifestation of intention to act or refrain from acting in a specified way, so made as to justify a promisee in understanding that a commitment has been made." *RESTATEMENT (SECOND) OF CONTRACTS* § 2(1) (1981). Section 90 refers to "promise" and defines it by reference to section 2. *See id.* § 90 reporter's note cmt. a. Several scholars have noted the weak doctrinal basis for the *Hoffman* decision, in particular the absence of a finding that Red Owl officials made any specific promise to Hoffman. *See, e.g.*, CHARLES FRIED, CONTRACT AS PROMISE 24 (1981) (arguing that *Hoffman* is best explained as liability for negligent misrepresentation); Mark P. Gergen, *Liability for Mistake in Contract Formation*, 64 S. CAL. L. REV. 1, 33-36 (1990) (same).

\(^{26}\) Commentators offer alternative theories of liability that would support the *Hoffman* result. Some argue that the decision can be grounded in a duty to bargain in good faith. *See, e.g.*, Gregory M. Duhl, Red Owl's Legacy, 87 MARQ. L. REV. 297, 314-21 (2003); Charles L. Knapp, *Enforcing the Contract To Bargain*, 44 N.Y.U. L. REV. 673, 686-90 (1969); Robert S. Summers, "Good Faith" in *General Contract Law and the Sales Provisions of the Uniform Commercial Code*, 54 VA. L. REV. 195, 224-25 & n.115 (1968). This theory is undermined by the absence of any evidence of bad faith by Red Owl officers. Red Owl's agent was, at most, careless in not inquiring further about what Hoffman meant when he said he could contribute about $18,000. Hoffman, however, was much more careless because every Red Owl financial proposal listed Hoffman's $18,000 equity contribution as exclusive of any additional debt needed to sustain the franchise. The proposed cash requirements for the franchise increased over time, but the equity requirements remained largely fixed; the additional proposals that required cash were loans that Hoffman could have repaid if the larger estimated cash flow turned out not to be necessary to run the grocery business.

A more plausible doctrinal claim for Hoffman might have been either for negligent misrepresentation based on the theory that Red Owl officials carelessly represented that $18,000 of capital would be adequate to support a franchise, or for unjust enrichment based on quasi-contract because Hoffman, by his actions, gave Red Owl valuable information regarding his future prospects as a franchisee. There are many problems applying either of these theories to arm's-length bargaining contexts, however. Imposing liability for the casual statements and contacts that are prevalent in business could chill contracting. Hence, the majority rule imposes liability for negligent misrepresentation in commercial contexts only when the party making the statement possesses unique or specialized expertise or is in a special relationship of trust and confidence with the injured party such that the injured party was justified in relying on the misstatement. *See, e.g.*, Eternity Global Master Fund Ltd. v. Morgan Guar. Trust Co. of N.Y., 375 F.3d 168, 187-90 (2d Cir. 2004). Similarly, unjust enrichment claims rarely succeed unless the defendant specifically and wrongfully induced the benefit. A claim for unjust enrichment "do[es] not lie simply because one party benefits from the efforts or obligations of others, but instead it must be shown that a party was unjustly enriched in the sense that the term 'unjustly' could mean illegally or unlawfully." First Nat'l Bank v. Ramier, 311 N.W. 502, 504 (Minn. 1981); *accord* Mon-Ray, Inc. v. Granite Re, Inc., 677 N.W.2d 434, 440 (Minn. Ct. App. 2004); *see also* Scott, *supra* note 22 (manuscript at 23-27) (explaining that, under this rule, *Hoffman* cannot be justified as a recovery based on unjust enrichment).

\(^{27}\) *See* Farnsworth, *supra* note 3, at 236-43.
to award reliance damages on a promissory estoppel claim under similar facts; rather, the court required evidence that the defendant had wrongfully induced a benefit.\textsuperscript{28} Courts in other jurisdictions have established similarly strict limitations for imposing promissory liability based on representations made during the negotiation process.\textsuperscript{29}

In order to evaluate systematically how contemporary American courts treat reliance investments made before the parties have written a complete contract, we analyzed a sample of 105 cases litigated between 1999 and 2003 that directly presented the issue of recovery for precontractual reliance.\textsuperscript{30} Our goal was to disaggregate the precontractual reliance cases by uncovering the commercial patterns that generated litigation and identifying the legal consequences courts attached to those patterns.

The cases in our sample fell into four patterns, each of which produced a different legal outcome. Thirty cases raised the issue of reliance in the absence of any agreement by the parties regarding terms. These cases thus posed the question whether the plaintiff could recover reliance costs even though the parties had not reached any agreement. The courts did not find liability, whether based on promissory estoppel or quantum meruit, in twenty-six, or approximately 87%,
of the thirty preliminary negotiation cases. The case data thus show that, absent misrepresentation or deceit, there generally is no liability for inducing reliance investments during the negotiation process. In twenty-seven cases, the parties had agreed on some material terms, but the court nonetheless denied recovery for breach of contract because the parties had also indicated, either expressly or by implication, that they did not intend to be legally bound. Thirty-six cases turned on


32 See Teachers Ins. & Annuity Ass'n of Am. v. Tribune Co., 670 F. Supp. 491, 497 (S.D.N.Y. 1987) ("It is fundamental to contract law that mere participation in negotiations and discussions does not create binding obligation, even if agreement is reached on all disputed terms. More is needed than agreement on each detail, which is overall agreement ... to enter into the binding contract.").


It is noteworthy that, of these twenty-seven cases, only one awarded restitution to the plaintiff. See Thayer v. Dial Indus. Sales, Inc. 189 F. Supp. 2d 81, 91-92 (S.D.N.Y. 2002). The conventional view is that a promisee can recover in restitution for partial performance of an indefinite agreement. See E. ALLAN FARNSWORTH, CONTRACTS § 3.30, at 214 (4th ed. 2004) (citing Bragdon v. Shapiro, 77 A.2d 598 (Me. 1951), in which the court permitted an employee to recover
whether preliminary agreements were sufficiently complete to be binding contracts, even though they contemplated a further memorialization, because the evidence showed that the formal writing may not have been essential. The courts treated these agreements as fully binding contracts.34 Finally, and most interestingly, twelve cases turned on whether there was a preliminary agreement to negotiate further in good faith.35

In sum, the sample shows that courts consistently have denied recovery for precontractual reliance unless the parties, by agreeing on something significant, indicated their intention to be bound.36 The key issues thus involve reliance behavior that follows the conclusion of an agreement that is incomplete in some respects. Litigation results because the agreement does not represent the final stage in the contracting process. Central to these cases, therefore, are the following questions: First, what criteria do courts use to decide whether parties have made an enforceable preliminary agreement? Second, what does enforcement entail? In the next section, we examine the evolving legal doctrines that affect these questions.


36 Courts traditionally consider a variety of factors as proxies for the intent of the parties regarding when they have reached “agreement,” including the extent to which agreement had been reached on all or most of the terms, whether this type of contract typically is reduced to a formal writing, the level of detail involved in the transaction, and the amount of money involved. See, e.g., Miss. & Dominion S.S. Co. v. Swift, 29 A. 1063, 1067 (Me. 1894); RESTATEMENT (SECOND) OF CONTRACTS § 27 cmt. c (1981).
B. The Enforcement of Preliminary Agreements

The initial issue in precontractual liability cases is whether the parties have manifested assent to an exchange. If the parties have not made a sufficiently clear and definite assent to an exchange, their negotiations are treated as preliminary and reliance investments made in the course of negotiations are not recoverable. The courts have had difficulty, however, with preliminary agreements that settle some major terms but leave significant additional terms open for further negotiation. These "agreements to agree" invoke a core principle of the common law of contract: an enforceable contract requires promises that are sufficiently certain and definite that a court can ascertain the parties' intentions with a reasonable degree of certainty. This principle rests on the understanding that parties write contracts primarily to enable a party who feels herself unjustifiably disappointed to invoke the law's aid. It follows that parties do not intend to invoke the law — that is, they do not intend to be legally bound — when their agreement is so vague or lacks so many terms that a court cannot know what remedy to award. In contrast, a court can infer from terms that are sufficiently complete and definite to ground a remedy that the parties intended to make a legally enforceable contract. The focus

37 See Restatement (Second) of Contracts §§ 17, 18. The manifestation of assent can be oral unless the statute of frauds requires a written assent, and it can be by conduct as well as by words. See id. § 19.

38 The manifestation of assent must be sufficient to ground an objective belief by each party that the other has made a promise. Id. § 2 cmt. b. A promise, in turn, is determined by a party's objective manifestation rather than subjective intent. See Hotchkiss v. Nat'l City Bank, 200 F. 287, 293 (S.D.N.Y. 1911). By definition, therefore, a manifestation of uncertain or indefinite intent cannot qualify as a promise. See, e.g., Candid Prods., Inc. v. Int'l Skating Union, 530 F. Supp. 1330, 1333-34 (S.D.N.Y. 1982); see also Restatement (Second) of Contracts § 33.


40 For example, in Petze v. Morse Dry Dock & Repair Co., 109 N.Y.S. 328 (App. Div. 1908), the New York court held that an agreement providing that "[t]he method of accounting to determine the net distributable profits is to be agreed upon later," id. at 329 (quoting the agreement between the plaintiff and the defendant), was unenforceable under the indefiniteness rule. See id. at 331. Courts thereafter have held consistently that such "agreements to agree" are unenforceable as long as any essential term is open to negotiation. See Robert E. Scott & Jody S. Kraus, Contract Law and Theory 34-44, 322-25 (3d ed. 2002).

41 Courts will infer an intent to be bound even though some terms in the agreement have been left open. For example, the Uniform Commercial Code provides that, even if the parties failed to agree on certain terms, an agreement is a fully binding contract if the parties intended to be legally bound and there is a sufficiently definite basis to permit the court to grant an appropriate remedy in case of breach. U.C.C. § 2-204(3) (2005). The U.C.C. also follows the common law cases holding that price terms in sales contracts can be inferred from evidence of market prices. Thus, section 2-305 of the U.C.C. permits parties to conclude a sales contract even if they did not agree on a price, or if they agreed to agree on a price but subsequently could not do so. Under the
on the parties' intentions — permitting parties to determine just when their agreement becomes binding — enables parties to "negotiate candidly, secure in the knowledge that [they] will not be bound until execution of what both parties consider to be [a binding] document."42

Recently, in a major shift in doctrine, courts have relaxed the knife-edge character of the common law by which parties are either fully bound or not bound at all. Instead, a new default rule is emerging to govern cases in which the parties contemplate further negotiations.43 The default rule starts with the presumption that preliminary agreements typically do not create binding contracts.44 This presumption follows the common law approach and rests on the view that courts should not hold parties to contracts unless the parties intended to make them. The new default rule requires parties to such a preliminary agreement to "accept a mutual commitment to negotiate together in good faith in an effort to reach final agreement."45 Neither party, however, has a right to demand performance of the transaction. If the parties cannot ultimately agree on a final contract, they may abandon the deal.46

The doctrinal key to the enforcement of these agreements is the parties' intent. Courts honor express reservations of intention as well as statements of intention to be fully bound. The major doctrinal development is that modern courts recognize a further obligation to implement parties' expressed intent to bind themselves in preliminary agreements by creating a duty to bargain in good faith even when one of them prefers not to deal.

This modern approach provides too little normative guidance. The cases endorse a multifactor analysis that invokes the language of the agreement; the existence, number, and character of open terms; the extent of any reliance investments or partial performance; and the customary practice regarding formalities.47 The court is to consider, in

U.C.C., then, a court is asked to focus on the underlying question of intent and is encouraged to find an intention to contract despite the existence of open or indefinite terms.

42 Winston v. Mediafare Entm't Corp., 777 F.2d 78, 80 (2d Cir. 1985).

43 This rule, developed by Judge Leval, has been followed extensively. See supra note 7.

44 See R.G. Group, Inc. v. Horn & Hardart Co., 751 F.2d 69, 74 (2d Cir. 1984).

45 Teachers Ins. & Annuity Ass'n of Am. v. Tribune Co., 670 F. Supp. 491, 498 (S.D.N.Y. 1987). When the parties have agreed upon everything important — when they have made what courts call a "fully binding preliminary agreement" — courts will enforce the disappointed promisee's expectation. See, e.g., Adjustrite Sys., Inc. v. GAB Bus. Servs., Inc., 145 F.3d 543, 548 (2d Cir. 1998); Gorodensky v. Mitsubishi Pulp Sales (MC) Inc., 92 F. Supp. 2d 249, 254–55 (S.D.N.Y. 2000). We focus here on so-called "binding preliminary commitments" in which the parties have left important matters for further negotiation.

46 One court recently referred to this way of enforcing preliminary agreements as "the modern trend in contract law." Burbach Broad. Co. of Del. v. Elkins Radio Corp., 278 F.3d 401, 409 (4th Cir. 2002).

47 See, e.g., Tribune, 670 F. Supp. at 499–503; see also supra note 36.
addition, the context of the negotiations resulting in the preliminary agreement. Any list of relevant factors confines a court’s discretion to some extent, but it leaves the decision process largely obscure when, as with these factors, courts fail to attach weights to the factors or to specify the relationship among them. For example, focusing on the number of terms that remain open is unhelpful: courts cannot easily determine whether many terms or only a few remain to be negotiated. Furthermore, the cases do not indicate what the parties are supposed to bargain over, or when the refusal to agree constitutes bad faith, or just what should be the remedy for bad faith. These normative questions cannot be resolved until the relevant positive questions are answered.

III. A MODEL OF SIMULTANEOUS AND SEQUENTIAL INVESTMENT

A. The Model’s Assumptions: Why Parties Write Preliminary Agreements

Our model attempts to explain why parties make preliminary agreements and how such agreements can break down. To introduce the analysis, suppose that two parties come together to explore whether to produce a grinding machine that can be used to reduce various metallic ores and to produce a machine if it turns out to be profitable. Grinding machines can take a number of forms depending on cost and demand. One of these parties — the seller — invests in this project by researching the technical feasibility and cost of producing various types of grinding machines. The other party — the buyer — invests by exploring demand for grinding machines and possible financing options. A “state of the world,” or “ex post state,” is defined by the realized values of three economic parameters: the level of demand for various grinding machine types, the cost of producing each of these types, and the options for financing. At the start, the parties know the distributions from which the values of the relevant parameters will be drawn. The parties learn the true values only after they invest. The parties then will continue their venture if the market turns

48 See Tribune, 670 F. Supp. at 500–01. This final factor recognizes that preliminary agreements always have open terms; hence, the existence of open terms does not preclude the obligation to negotiate further in good faith. See id. at 500–02.

49 This section is written in narrative form, but it contains the assumptions on which the model is based.

50 In this Part, we extend the model of Vladimir Smirnov & Andrew Wait, Holdup and Sequential Specific Investments, 35 RAND J. ECON. 386 (2004), to the preliminary agreement context. This modeling strategy, in turn, is based on staged finance models used to explain venture capital investing. See id. at 386–87.
out to want a particular type of grinding machine that they can produce and finance at an appropriate cost. Otherwise, the parties will abandon the project.

To formalize this example, let two risk-neutral parties, a seller and a buyer, meet at time $t_0$ to consider a project. The project will certainly fail unless both parties invest in it, though it may still fail even if both invest. If the parties do not reach agreement and trade, the seller's investment is wasted — that is, her investment is fully relation-specific. The buyer's investment may be fully relation-specific, or it may benefit the seller even if the parties do not reach a deal. For example, the seller may benefit by learning more about the nature of demand for capital inputs in the mining industry even if the parties conclude that grinding machines will not sell.

The parties cannot contract on their project at $t_0$ because it is too complex. In particular, the project can take many forms, and there are a large number of possible states of the world. A project would be profitable to pursue, we assume, in only one of the possible ex post states. In that unique state, the level of demand, the financing, and production cost structure are such that the parties can profitably produce one of the possible grinding machine types. When both the set of possible project types and the set of possible ex post states are large, and the parties do not know at the outset which of the possible project types, if any, will be profitable, it is not feasible for them to write an ex ante contract on the project. Nevertheless, the parties can agree at $t_0$ on the nature of the project (to produce a grinding machine); on what each party, broadly speaking, is to do (be responsible for product design and costs and attempt to line up final users and financing); and on timing decisions (whether to explore technical feasibility first or to explore technical feasibility and market opportunities at the same time). A project becomes tangible — it will support a complete contract — after these initial investments.

There are two investment regimes. In the first, the parties agree to invest simultaneously. In the second, the parties agree that one party will invest first and the other will wait a period and then invest. Each party knows the distribution of costs from which the other's investment will be drawn and can observe the results of the investment, but the precise timing and level of actual investment is private information. For example, if the seller invests in creating a set of plans, the buyer ultimately can observe whether the seller created the plans. However, the buyer cannot know when the seller began to work or the level of the seller's investment that creating the plans turned out to require. These assumptions are motivated by realism: when parties are in different industries or trades, it is difficult for each of them to observe the other's cost function. Each party believes, however, that if a dispute were to arise, she could verify to a court a fraction of the costs
of her own completed investment. For the reasons just given, this fraction also is private information and so is not contractible.

In both investment regimes, the parties learn which of the possible project types, if any, would be profitable to produce after time has passed and at least one party has invested. In the grinding machine example, the seller's research may reveal that no new grinding machine is technically feasible, or the buyer's research may reveal that only one machine type could sell in the actual ex post state. Investment and the resolution of uncertainty thus play two roles: they reveal whether a project would be profitable, and they make profitable projects sufficiently tangible to be realized in final contracts.

The parties cannot write a final contract before the ex post state of the world is revealed. Although ex ante contracting has been shown to induce efficient investment in some contexts in which there is asymmetric information, ex ante contracting cannot encourage efficient investment in the contexts we describe. Even when parties cannot contract directly on investment behavior, the ex ante contract could induce efficient investment if it could appropriately allocate the expected surplus that the contemplated transaction would yield. For example, if one party must incur the larger share of the investment cost to bring a project to fruition, the contract could award this party the larger share of the expected surplus. The preliminary agreements we study cannot affect investment behavior in this way, however. We assume, consistent with the common view that it is difficult to contract directly on expected profits or costs, that parties can observe but cannot verify to a court the expected surplus from the complex projects that we model. When a court cannot observe a project's surplus, it cannot enforce a contract that attempts to allocate that surplus in such a fashion that will induce each party to choose the efficient investment level.

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52 An economic variable is unverifiable if the costs to the parties of establishing the value of the variable in a legal proceeding exceed the expected gains. Although parties commonly can estimate the expected value of conducting a transaction, the costs required to prove the profit that a forgone transaction would have yielded often exceed the share of that profit that a successful litigant would realize. Verifiability is not coextensive with, but is related to, the legal concepts of foreseeability and certainty. Thus, we assume that the parties can observe the expected surplus from completing their project, so that surplus is foreseeable to them, but we also assume that the cost of establishing the surplus in court would exceed the gain. Legal costs may be high because, among other reasons, a party has to introduce a great deal of evidence to show that her contract partner should have known the gain expected from a completed deal. For a discussion of how front-end investments by parties in stipulating evidentiary proxies, allocating burdens of proof, and allocating standards of proof can lower these back-end enforcement costs, see Robert E. Scott & George G. Triantis, Anticipating Litigation in Contract Design, 115 YALE L.J. 814 (2006).
The inability to contract on surplus directly would not be fatal, however, if the parties either could commit not to renegotiate their ex ante contract or could specify in that contract the project type the parties hoped later to produce and trade. Regarding the possibility of renegotiation, suppose that only the seller is to invest. The ex ante contract could authorize the seller to make a take-it-or-leave-it offer to the buyer after the investment stage is over. The seller will then make an offer awarding to her the full surplus that trade will generate. Anticipating this payoff, the seller will invest efficiently; that is, she will invest to increase expected surplus until the marginal gain from further investment equals the marginal cost. Contracts that allocate bargaining power to a seller in this way cannot work, however, if the buyer can refuse the seller’s take-it-or-leave-it offer and propose a new division of the surplus. Then, the seller’s choice will be to bargain over the division — to renegotiate the ex ante contract — or to forgo gains. Because parties are reluctant to leave money on the table, the seller would renegotiate, and she seldom could bargain to capture the entire gain. But any seller who anticipated not being able to appropriate the full value from her investment in a project would underinvest; that is, she would invest only until the marginal cost equaled her fraction of the expected gain. Because parties cannot commit not to renegotiate under current law, the proposed contract, or variants of it for cases in which both parties must invest, cannot induce efficient investment.

Specifying the project type through specific performance contracts would also be ineffective in the contexts we consider. Parties can sometimes write specific performance contracts that induce efficient investment even when renegotiation cannot be prevented. For example, if the parties know in advance that they will either trade a particular grinding machine or not trade, their ex ante contract can require the seller to deliver that machine at a fixed price if the state of the world turns out to be favorable. If a court would enforce this contract specifically, and if the price were appropriately chosen, the contract could induce efficient investment. However, even if the parties could verify to a court that the favorable state of the world had materialized, in our model the parties could not specify in advance just

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53 For a discussion of how renegotiation and describability affect contracting behavior, see Bolton & Dewatripont, supra note 10, at 560–78. The principal paper showing how parties’ inability to describe in the ex ante contract what is to be traded eliminates the value of ex ante contracting is Oliver Hart & John Moore, Foundations of Incomplete Contracts, 66 Rev. Econ. Stud. 115, 120 (1999).

what project type they would later want to trade because there are too many possible product types that may work and too many possible states of the world that may exist. A court cannot specifically enforce a contract without a subject matter. As a consequence, it would be pointless for the parties to set a price. And without a price, the ex ante contract could not allocate the transaction’s expected surplus to induce efficient investment. In our model, then, there is no gain from ex ante contracting, so such contracting will not occur. The model thus captures the decided cases: the parties in these cases either failed to agree on anything or had made only preliminary agreements that did not attempt to allocate surplus, set prices, or specify the parties’ bargaining power in an ex post renegotiation.

**B. The Model’s Technical Details**

The nature of the project requires that one of the parties, who we assume is the buyer, moves first. If the parties make a preliminary agreement at \( t_0 \), the buyer will invest the discrete sum \( x_b \) at time \( t_1 \). In the simultaneous investment regime, the seller invests the discrete sum \( x_s \) at \( t_1 \) as well; in the sequential regime, the seller invests at time \( t_2 \). After a party completes its investment, the other party can observe \( a \), where \( i \in \{ b, s \} \), where \( 0 < a < 1 \), and where the investing party can later verify \( a \) to a court. Each investment \( x \) is composed of various elements: raw materials, salaries, and the value of human capital. The cost of some of these elements, such as the raw materials a party ordered, likely will become verifiable later, whereas the cost of other elements, such as time spent thinking, will not. The sum of the verifiable elements divided by the total investment \( x \) equals the verifiable fraction \( \alpha \). At \( t_0 \), each party knows its own expected \( \alpha \) but does not know its partner’s expected \( \alpha \).

The party’s investments are assumed to be perfect complements in the sense that the project will fail unless both investments are made. If the parties both invest, however, the project nevertheless succeeds only with probability \( p < 1 \) — when the state of the world turns out to be favorable.

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55 If the technology of the project requires both parties to invest simultaneously, the problem is not normatively interesting. The most reasonable equilibrium has both investing when investment would be efficient. In these circumstances, the parties will pursue an efficient project and will abandon an unsuccessful project, and there is no role for law to play. If the technology of the project instead permits either to invest first, the parties play a dynamic game in mixed strategies to determine who moves initially, but the qualitative results reached below will not change.

56 If \( \alpha \) were verifiable, the parties could induce optimal investment by requiring the party who failed to invest appropriately to pay \( 1 / \alpha \) of the other party’s reliance costs. On our assumptions, this contract cannot be written. The parties also cannot write a contract requiring each of them to invest up to the level \( x \) because, plausibly in our view, a party cannot know just what level of investment her partner must reach in order for him to perform his assigned task, and that party also would have difficulty observing whether her partner had invested up to \( x \).
be favorable — and fails with probability $1 - p$. A successful project returns a surplus $S > 0$ that is net of production cost but gross of investment cost. The expected surplus in any other state of the world is $S \leq 0$, so no project is pursued in these states.

If both parties invest at $t_1$ and the project turns out to be profitable, they will write a final contract and begin to pursue the project at $t_2$. If one party invests at $t_1$ and the other invests at $t_2$, the parties will begin to pursue the project one period later, at time $t_3$. The parties discount returns at $\delta < 1$, and investment is assumed to be ex ante efficient; that is, the expected value of the project at $t_0$ in the sequential investment regime, $p\delta S$, exceeds the sum of the parties' investment costs.\(^57\) We note finally that in the sequential investment regime, in which the seller is permitted to invest after the buyer invests, the seller will exit the project unless it turns out to be a success. Figures 1 and 2 describe the timelines for these regimes.

**FIGURE 1. SIMULTANEOUS REGIME**

![Simultaneous Regime Diagram]

**FIGURE 2. SEQUENTIAL REGIME**

![Sequential Regime Diagram]

\(^57\) Regarding the expected project value, the project succeeds with probability $p$, and when it succeeds it returns $S$. In the simultaneous investment regime, the parties receive $S$ two periods after they invest, so $S$ must be discounted one period; in the sequential regime, the parties receive $S$ after three periods, so they discount $S$ by two periods. Hence, the expected project value in the sequential regime is $p\delta S$. Our assumption that this value exceeds total investment costs implies that the simultaneous investment regime is also socially efficient because returns are realized one period earlier in this regime. We assume that the project is efficient because we want to see when parties will pursue such projects.
If the project turns out to be profitable to pursue, the parties will write a complete contract. Because their ex ante agreement did not describe or price the particular project they will trade, the parties must bargain as if from scratch to divide a profitable project’s expected gains. We assume Nash bargaining and normalize each party’s next-best option to zero. This assumption implies that the price in the parties’ complete contract will equally divide the surplus that trade is expected to create.58

The comparative welfare effects of these investment regimes are ambiguous a priori. On the one hand, the simultaneous regime is better, all else equal, because it accelerates the realization of returns: the parties capture profits earlier. On the other hand, if no successful project is revealed, both parties’ investments would be wasted in the simultaneous regime, whereas only the buyer’s investment would be wasted in the sequential regime.

C. The Parties’ Behavior

We begin with the simultaneous investment regime and introduce the holdup problem that exists when parties must invest before they make a fully binding contract.59 The project succeeds with probability $p$, each party will then receive one half the project’s surplus less its investment cost, and the gross return must be discounted one period. That is, buyer’s and seller’s expected returns from investment in this regime are, respectively:

$$\frac{pS - x_b}{2}$$

58 According to Nash bargaining, a party’s bargaining power in a negotiation is a function of the parties’ disagreement points and their relative patience, as measured by their discount rates. The party who has the better outside option — the better disagreement point — has more power in the negotiation because he must receive a larger share to compensate him for making the deal. Similarly, the more patient party has more power because he can wait longer for a good offer. Our assumption that both parties’ next-best options are zero implies that they have the same disagreement points. It also is customary to assume that commercial parties are equally patient — they have the same discount rates — because commercial parties usually can borrow or lend in the same competitive capital market. On these assumptions, the parties have equal bargaining power so neither can credibly demand more than an equal split. If one party does demand a more favorable split, the other will refuse, knowing that the demanding party will accept half the expected gain rather than receive no gain at all. The qualitative results that we reach will not change if the bargaining power assumption is relaxed. For example, if the seller is assumed to have more bargaining power than the buyer, she will invest a larger sum — because she will realize more than half the surplus — and the buyer will invest less, but the parties still will have incentives to behave strategically that are normatively interesting to analyze.

59 The analysis in this section assumes that the law does not award a remedy unless the parties have made a complete contract because the issue is whether a legal remedy would be useful in the context under study.
and

\[
\frac{p \delta S}{2} - x_s. \tag{2}
\]

Because the parties' costs may not be equal, the sum of Expressions (1) and (2) can be positive — that is, the project can have positive expected value — even if one of the private expected returns is negative. The project requires the participation of both parties, however, so if one party's expected return is negative, the project will not be undertaken. This is the ex ante holdup problem: a party will not invest at all when he must share the expected gain with his partner, and as a consequence the party's portion of the return will be below his cost. The problem would vanish if the parties could contract on investment at \( t_0 \). When a project will generate total expected gains in excess of costs, the party whose expected return is positive can guarantee his partner a nonnegative return by agreeing to reimburse his partner for investment costs if the project is not pursued. Investments are not contractible in this model, however.

In the sequential regime illustrated in Figure 2, the buyer invests initially and then, if the project will be a success, the parties renegotiate. Going forward from \( t_s \), the net gain from the seller's investment is the expected project surplus less the seller’s cost. The buyer’s costs are then sunk and so will be ignored when the parties renegotiate. In the success state, the buyer expects to receive half the surplus less his investment cost; the seller expects to receive half the surplus. Because returns in this regime are realized at \( t_3 \), they must be discounted two periods. Hence, in this regime the parties expect that renegotiation to a complete contract for a successful project will award the buyer and seller, respectively:

\[
\frac{p(\delta^2 S - \delta x_s)}{2} - x_b \tag{3}
\]

and

\[
\frac{p(\delta^2 S - \delta x_s)}{2}. \tag{4}
\]

Our ex ante holdup result is identical to the result recently presented by Luca Anderlini and Leonardo Felli, see Luca Anderlini & Leonardo Felli, *Transaction Costs and the Robustness of the Coase Theorem*, 116 ECON. J. 223, 229 (2006) (labeling this result "Proposition 1"), except that the costs in their model are transaction costs, whereas the costs in our model are investment costs. In both models, the parties' inability to contract in advance on costs can preclude the formation of some efficient agreements.
To compare the relative efficiency of these regimes, denote social welfare from the simultaneous and the sequential investment regimes $W_{\text{sim}}$ and $W_{\text{seq}}$, respectively. In formal terms, the simultaneous regime is better if $S(1 - \delta) > x_s(1 / p\delta - 1)$. This inequality shows that a social planner would prefer simultaneous investment when: (1) the project is likely to succeed, so the seller’s investment is unlikely to be wasted ($p$ is high); (2) the parties’ discount rate is high, so that delaying returns by a period will be costly ($\delta$ is low); (3) the seller’s costs probably will turn out to be low, so that little will be saved by letting the seller await events ($x_s$ is expected to be small); and (4) the surplus will be large ($S$ is expected to be large).

The parties’ preferences sometimes will not correspond to society’s preference, however. The buyer always prefers simultaneous investment because he does not have to reimburse the seller’s cost in this regime. Specifically, the buyer prefers simultaneous investment when Expression (1) exceeds Expression (3):

$$\frac{p\delta S}{2} - x_b > \frac{p(\delta^2 S - \delta x_s)}{2} - x_b.$$  \hspace{1cm} (5)

This inequality reduces to $S > x_s / (\delta - 1)$. The right-hand side of this inequality is always negative because $\delta < 1$. $S$ is positive because the parties only pursue positive-expected-value projects, so the inequality is always satisfied.

In contrast to the buyer’s preferences, the seller’s preferences are parameter-specific. She prefers simultaneous investment when it would generate a greater private return — that is, when Expression (2) exceeds Expression (4):

$$\frac{p\delta S}{2} - x_s > \frac{p(\delta^2 S - \delta x_s)}{2}.$$  \hspace{1cm} (6)

Assuming that the buyer will participate, sequential investment is efficient when the left-hand side of this inequality is negative and the right-hand side is positive — that is, when the seller will reject the simultaneous regime but can realize a positive return in the sequential regime. The seller can earn a positive return in the sequential regime because she is not subject to holdup in this regime; she will invest only if the ex post bargain compensates her. The availability of the se-

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61 The social welfare in a regime is the expected value of success to both parties discounted to present value, less the sum of the parties’ costs. Therefore, $W_{\text{sim}} = p\delta S - x_s - x_s$, and $W_{\text{seq}} = p\delta S - p\delta x_s - x_s$.

62 In the renegotiation, the parties will agree to a contract price of $k = x_s + (\delta^2 S - \delta x_s) / 2$, so the seller recovers her costs while the buyer does not.
quential regime thus permits some projects to be done that would otherwise be forgone.

The availability of the sequential regime nevertheless creates an opportunity for the seller to behave strategically. To see why a seller might choose to defect, suppose that simultaneous investment is more efficient than sequential investment and the parties agree to function in the simultaneous regime. Solving Inequality (6) for the surplus $S$ yields Inequality (7), which more clearly indicates how the surplus $S$ depends on the variables that affect the seller's incentive to comply with an agreement to invest simultaneously:

$$S > \frac{x_s(2 - p\delta)}{p\delta(1 - \delta)}. \quad (7)$$

The seller will comply when the left-hand side of Inequality (7) — the project's surplus — is larger than the right-hand side. The right-hand side of (6), in turn, is increasing in $x_s$ and $\delta$ and is decreasing in $p$. Inequality (7), therefore, shows that the seller is more likely to defect to sequential investment if her costs are high because she would save a more substantial sum if there is no profitable project to pursue. Inequality (7) also shows that the seller is more likely to defect when she is more patient. The seller trades off the value of the option to delay and see how things turn out against the cost of delaying a possibly positive return. The more patient the seller is, the more likely she is to make that tradeoff in favor of delay. Finally, the inequality shows that the seller is more likely to comply with her agreement if there is a high probability that she will recover her investment costs. The probability of cost recovery gets larger as the parties' project becomes more likely to succeed.\(^{63}\) To be sure, the seller's incentive to breach an agreement to invest simultaneously can be overcome if a successful project will generate a large enough gain — that is, if $S$ is large. Nevertheless, breach is always a possibility, and it is inefficient when $W_{\text{sim}} < W_{\text{seq}}$.

**D. The Ex Post Holdup Problem and Our Solution**

The seller's incentive to breach may prevent some efficient projects from being pursued. The buyer's expected return from sequential investment can be negative when his return from simultaneous investment is positive. In such cases, the buyer will participate only if the seller agrees to simultaneous investment. Even if the seller agrees,\(^{63}\)

\(^{63}\) Formally, the discount factor $\delta$ becomes larger — future returns become worth more — as the party becomes more patient. Hence, that the right-hand side of Inequality (7) is increasing in $\delta$ means that patient sellers are more likely to defect from agreements to invest simultaneously. That the right-hand side of Inequality (7) is decreasing in $p$ means that sellers are more likely to defect when projects are only marginally likely to be successful — that is, when $p$ is low.
however, a sophisticated buyer will still not participate if his costs will be high and the seller's defection is a serious possibility. The seller prefers to commit to simultaneous investment in this circumstance whenever her expected gain is positive, but she cannot. As section C shows, sellers sometimes have an incentive to wait, and the parties cannot contract on the timing or level of investment. Hence, the seller's promise to begin by a certain date and then to invest up to the optimal level will not be credible. As a consequence, efficient projects will sometimes be forgone. This is the ex post holdup problem.

To examine whether the law can help, denote the buyer's expected return in the simultaneous regime \( g = \frac{p\delta S}{2} - x_b \). Denote the buyer's expected return in the sequential regime \( h = \frac{p(\delta S - \delta x_s)}{2} - x_b \). As section C shows, \( h < g \). In the case we consider in this section, \( h \) is negative and \( g \) is positive. Also, let the subjective probability that the buyer assigns to seller defection from the simultaneous regime be \( q \). Finally, recall that though parties cannot contract on investment or on the fraction of investment \( \alpha \) that later becomes verifiable, a portion of the buyer’s investment cost \( \alpha x_b \) is verifiable ex post. If the law permitted the buyer to recover the verifiable portion of his reliance, then at \( t_0 \) the buyer’s expected return from an agreement to invest simultaneously would be \( q(h + \alpha x_b) + (1 - q)g \).

The first term, \( q(h + \alpha x_b) \), is the buyer's expected return if the seller does defect: it equals the loss from being forced into the sequential regime \( h \), offset by the reliance recovery \( \alpha x_b \), and multiplied by the probability of seller defection \( q \). The second term, \( (1 - q)g \), is the buyer’s expected return if the seller complies with her agreement: the probability of compliance \( 1 - q \) times the expected gain \( g \).

When the buyer’s expected return in the simultaneous investment regime is negative without the reliance offset and positive with it, a buyer who expects to recover reliance will make a preliminary agreement that he otherwise would have rejected. Hence, awarding verifiable reliance to promisees when promisors exploit them will increase the number of efficient preliminary agreements. Such awards also may deter parties from breaching these agreements. If a seller expects

64 The buyer cannot predict with certainty whether the seller will defect because he does not know \( x_s \). The buyer knows \( p \) and \( \delta \) however. When \( p \) is relatively low and \( \delta \) is relatively high, the prospect of seller breach can be sufficiently great to deter the buyer from participating.

65 The model here has at most two investment stages: either both parties invest at the same time or one invests and then the other does. The model generalizes to multistage projects in which it is efficient either for both parties to invest at the penultimate stage or for one to invest at this stage and the other to wait until the last stage. If both parties should invest at the penultimate stage but one of them expects the other to defect and wait, the former party may not invest at the penultimate stage. The other party will anticipate this and will not invest at the next-earliest stage, so the project will unravel. At some stage, there is a need for commitment.
that a nontrivial fraction of her buyer’s reliance will become verifiable, her incentive to comply increases materially.

We make five elaborating comments about our recommendation that the law should protect the buyer’s reliance interest in this category of cases. First, expectation damages cannot be awarded in these cases. The buyer’s expectation in the simultaneous regime is $\delta S / 2 - x_b$. The law cannot award this amount because neither the expected surplus $S$ nor the full amount of the buyer’s investment $x_b$ is verifiable under our assumptions. The legal requirement that damages must be reasonably certain and foreseeable precludes expectation recoveries in the cases we consider.

Second, the buyer should be afforded a remedy regardless of whether the project turns out to be efficient to pursue. When the project is efficient to pursue and the buyer agrees to the exploitative renegotiation price, delay by the seller should be treated as an instance of duress, and the buyer should be permitted later to sue for reliance. If the seller delays investing and the buyer’s investment shows that the project would be inefficient, the seller will exit. Although the project should not be pursued, the seller still should be liable for the buyer’s reliance. Awarding reliance in both cases will encourage buyers to make efficient preliminary agreements and will sometimes deter strategic behavior by sellers. Nevertheless, although protecting the buyer’s reliance interest will increase efficiency, it will not achieve the first-best outcome. In some cases, the verifiable portion of the buyer’s reliance will be too small to sustain his incentive to make a preliminary agreement. Moreover, recall that we have normalized each party’s next-best option to zero for modeling convenience. If the buyer’s option is positive, the base return of verifiable reliance in the deal may be too low to motivate efficient investment. First-best outcomes are

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66 The buyer’s investment may benefit the seller by permitting her to use the investment in other situations. For example, the buyer may show the seller how to package her product to make it desirable to many buyers. If the benefit is verifiable, an alternative remedy to reliance is quantum meruit: the buyer should recover the benefit he conferred on the seller. If this recovery creates a large enough offset to $h$, the buyer’s loss from holdup, the buyer again is encouraged to invest.

67 Courts sometimes can use evidentiary proxies for costs that would otherwise be private information. When these proxies are helpful, the fraction of reliance that is verifiable $\alpha$ will increase. See supra note 62.

68 The law should not require an inefficient performance, but it should discourage strategic behavior and encourage efficient investment. Thus, although the seller’s delay saved costs in this instance, delay should be treated as a breach. Permitting buyers to recover reliance in failed deals will not discourage sellers from participating. A fraction of the seller’s reliance costs will become verifiable if she invests. Therefore, a seller can establish, by her investment behavior, that she complied with her agreement to invest simultaneously. Only sellers that plan to behave in bad faith will be deterred.
difficult to achieve in asymmetric information environments, however. The rule we recommend would be a Pareto improvement.

Third, prior analyses show that protecting the reliance interest induces contracting parties to overinvest.\(^{70}\) Overinvestment is not a concern in this analysis because the model assumes investment is discrete: the buyer invests \(x_b\) or he does not. Since the model assumes that investment by the buyer would be ex ante efficient, the subsidy we advocate is also efficient. However, in reality, overinvestment conceivably can be a danger when, as sometimes happens, the parties' payoffs are a continuous function of the amount they invest. In these cases, because the remedy we advocate subsidizes the buyer's reliance in the breach state, the buyer can be induced to invest too much.

The danger of overinvestment is not serious, however.\(^{71}\) In the sequential regime, the marginal dollar of the buyer's expected return is subject to a large "holdup tax": he realizes less than half of that dollar because he must split gains with the seller and bear the seller's investment cost, as Expression (3) shows. The law would subsidize the marginal value of the buyer's investment if it permitted the buyer to recover verifiable reliance. Even when the buyer believes that the seller will breach with certainty and thus force him into the sequential regime, he has an incentive to overrely at the margin only if the value of the "breach subsidy" exceeds the cost of the holdup tax. Since the tax is larger than fifty percent, the subsidy has to be substantial; that is, a large fraction of the buyer's investment needs to be verifiable.\(^{72}\) In the simultaneous regime, the buyer also pays a holdup tax on the marginal dollar of his expected return, but he receives no breach subsidy. Thus, a buyer will underrely if he believes that the seller will certainly comply with her agreement to invest simultaneously. When the buyer makes his investment decision, he will compare the net marginal return in the sequential regime, weighted by the probability of seller breach, against the net marginal return in the simultaneous regime, weighted by the probability of seller performance. Since the breach subsidy may not by itself fully offset the tax in the sequential regime and sellers are more likely to perform than not, the expected value of


\(^{71}\) We establish this point formally in the Appendix but describe the underlying intuition here.

\(^{72}\) In such cases, the parties may contract directly on costs. Thus, for example, parties write cost-plus contracts when costs are substantially verifiable. See Patrick Bajari & Steven Tadelis, *Incentives Versus Transaction Costs: A Theory of Procurement Contracts*, 32 *Rand J. Econ.* 387, 396 (2001).
the marginal dollar of the buyer's return will ordinarily be less than a dollar. In sum, the buyer will almost always invest too little even when the law subsidizes him.

Fourth, if protecting reliance enhances efficiency, there is a question why parties do not contract directly on reliance expenditures. Reliance contracts are not common for two reasons. First, reliance is often unverifiable. Second, there is a moral hazard concern. The buyer, for example, is motivated to incur excessive exploration costs if he can partly externalize those costs to the seller. The moral hazard concern deters parties from contracting directly on reliance even when reliance is verifiable. The excessive exploration concern also exists in connection with mergers. Courts permit a disappointed acquirer to recover investigation and related costs when parties agree to a deal but the target later finds another buyer. Parties do not contract directly on these costs, but instead use breakup fees. A breakup fee ameliorates the moral hazard concern because the would-be acquirer's payoff when a deal breaks up is independent of the amount the acquirer invested in evaluating the acquisition. Courts treat breakup fees as liquidated damage clauses and enforce a breakup fee if it reflects a reasonable estimate of the buyer's costs. Thus, the better question here is why parties do not liquidate reliance damages in the preliminary agreement.

Our answer is that courts will probably treat such clauses as penalties. Under the penalty rule, courts will enforce liquidated damage clauses only if the promisee has a right to the damages at issue. Thus, courts will permit a promisee to liquidate an estimate of his expectation because there is a prior right to recover the expectation, and courts will permit a disappointed acquirer to liquidate transaction costs because there is a prior right to recover them. In the preliminary agreement context, many courts will not protect the promisee's reliance at all; other courts will protect reliance only if the promisor failed to bargain in good faith when a deal did not materialize. Thus, there is currently no clear rule permitting the unjustifiably disappointed party to a preliminary agreement to recover his investment costs when the promisor breaches. Because this is the law, a clause liquidating reliance costs in the preliminary agreement would probably be struck down as a penalty. Our analysis predicts, then, that if the right to recover investment costs becomes clearly established, parties will prefer liquidating an estimate of these costs to suing directly for them.

Fifth, the prospect of a reliance recovery before the parties make a final contract conceivably can chill negotiations and thus prevent the

pursuit of efficient deals. This effect should not be a serious danger as long as courts refuse to find a binding preliminary commitment unless all three aspects of a preliminary agreement — an intention to pursue a profitable project, a division of investment tasks, and an agreement on an investment sequence — exist. We make two comments with respect to the possibility that a danger might be thought to remain. Initially, the seller is the party whose participation may be chilled, but it is also the seller who wants the ability to commit to the preliminary agreement, for when the buyer refuses to deal, the seller must forgo a positive expected return. Awarding reliance to the buyer is the only effective way to permit the seller to commit to perform the preliminary agreement. A seller who does not want to commit can contract out because the rule we advocate is a default. Courts should, and do, enforce the analog of merger clauses that recite such intentions as: "No liability whatsoever is to attach to any representations made during negotiations and before a final written agreement is signed." 775

To summarize, the seller breaches in this model by promising to invest simultaneously but then, without investing, waiting until after the buyer has invested, and after the project has become tangible, either to exit or to renegotiate to complete the project. This breach creates two inefficiencies. First, if the buyer makes and complies with the preliminary agreement, and if the project is profitable, breach causes project returns to be unduly delayed. Second, if the buyer would otherwise not invest in the sequential regime, the possibility that the seller will force the buyer into this regime by delaying will sometimes cause sophisticated buyers not to make ex ante efficient preliminary agreements. Thus, awarding buyers reliance when sellers breach will increase the probability that parties will make these agreements. This conclusion can be restated in an illuminating way. The law encourages parties to invest and trade efficiently by enforcing the contracts they make. This Article shows that the law can also help by encouraging parties to make those exploratory investments that are a necessary precondition to the later writing of efficient final contracts.

Turning more directly to the law, we see that the question whether there was a preliminary agreement or no agreement should not turn on whether the contract has a price or indicates agreement on a "sufficient" number of terms. Rather, a preliminary agreement — an intention to make a binding preliminary commitment — should be found when the parties have agreed, albeit imprecisely, on the nature of the project; on the categories of action, such as marketing or construction, into which their investments are to fall; and on the order in which they are to act. There is breach of a binding preliminary commitment

75 See, e.g., cases cited supra note 29.
when the parties agree to proceed at roughly the same time and one of them materially delays. If the buyer can recover verifiable reliance, then, as we argue, parties will make more preliminary agreements. The courts, however, add the doctrinal requirement that breach triggers a duty to bargain in good faith. This duty is unnecessary, but if courts retain the obligation, the "mandatory subjects of bargaining" should be restricted to whether there actually was a breach — whether the promisor delayed investment — and the magnitude of the promisee's reliance. It is unnecessary to require the parties to bargain over whether to pursue the project itself because parties already have sufficient motivation to pursue efficient projects.

IV. APPLYING THE MODEL TO THE CASE LAW

In this Part, we examine the contemporary case law in light of two questions. First, do the cases reveal a behavioral pattern consistent with the model's description of how parties act in early reliance contexts? Second, do courts award damages in the circumstances in which our analysis suggests they should? The cases are the obvious vehicle for answering the second question, but as a rule, cases are a poor vehicle for answering questions about commercial behavior. Contract databases permit the predictions of theoretical models to be tested much more rigorously than cases do because it is often difficult to infer commercial behavior from the factual descriptions in court opinions. Regrettably, however, the contract databases are not appropriate for this Article because we study preliminary agreements, which are sometimes unwritten and, moreover, are not collected. As a positive matter, then, we show in the analysis that follows that the cases reveal behavior that is consistent with our model. We also show that courts sometimes, though not always, decide cases as we think they should.

A. The Databases and General Results

To test the model's predictive power, we assembled a case sample that focused precisely on the analytical framework established by Judge Leval in Teachers Insurance & Annuity Ass'n of America v. Tribune Co. A combination of a Westlaw KeyCite search and a Westlaw terms and connectors search produced a set of cases from which we culled a random sample of 142 cases dating from 1989 to 2005. Forty of the cases turned on issues that were not relevant to

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77 We selected every other case on the KeyCite list of citing references, leaving us with 120 cases. We then ran a terms and connectors search for an additional 30 cases. This search provided a second set of cases against which to compare the results of the first 120 to check for bias.
the enforcement of preliminary agreements. The remaining 102 cases involved a claim for recovery of early reliance investments. In thirty-eight cases, the court denied recovery on all grounds, including arguments based on Judge Leval's preliminary agreement taxonomy and on alternative theories of promissory estoppel, quantum meruit, breach of fiduciary duty, and misrepresentation. The court found, in the majority of these cases, that the parties were still engaged in negotiations, so that the facts could not sustain an inference that the parties intended to be legally bound.78

The remaining sixty-four cases fell into two categories. In thirty-three of these cases, the court held that a jury either could or correctly did find the agreement to be fully binding by its terms so that a court could protect the expectation interest.79 In the other thirty-one, the court held that the parties had either made a preliminary agreement or alleged sufficient facts to sustain a jury verdict finding a duty to bargain in good faith.80

introduced by the search method. The word search was (DA(AFT 05/25/2002) & ("letter of intent" "preliminary agreement" "working agreement" "protocol of intent" "letter of agreement" "memorandum of understanding" "agreement in principle" "loi" "mou") / ("good faith" "fair dealing") & breach). This search yielded 123 cases, and we selected every fourth case. Of those 30, eight were redundant with the KeyCite search, and so our queries returned a total of 142 different cases.


80 See, e.g., cases cited infra notes 86, 94–96, 102, 112, 118–19. The preliminary agreement cases include those in which the court enforced the agreements as binding preliminary commitments, as well as those in which the court held that there were sufficient factual issues raised to preclude summary judgment.
The cases indicate that parties often reach substantial agreement before they make reliance investments. Parties can agree on most terms but postpone the costs of drafting the contract documents and specifying the remaining terms; in this way, the parties protect their expectation interest because, by signaling their intent to be bound, they make what the courts describe as a fully binding agreement enforceable according to its terms. Alternatively, parties may make their agreement subject to conditions precedent such that the promisor has no duty to perform unless stated exogenous events occur. A common example in financing agreements is the required approval of a third party such as a corporate board as a condition precedent to performance. Finally, in a number of cases, parties sign comfort agreements that specifically state that they are nonbinding. In these cases, parties appear to rely on trust contracts to protect early investment. All of these examples suggest that parties have available to them, and commonly use, various formal and informal contractual methods for protecting early reliance investments.

The precontractual reliance problem does arise, however, in a significant number of cases. As we explain in Part II, in the absence of any agreement, courts generally deny claims for recovery of reliance costs regardless of the theory of recovery advanced by the plaintiff. Moreover, even if a court finds a preliminary agreement sufficient to sustain an obligation to bargain in good faith, the defendant is still able to exit the negotiations without liability in a number of instances. The courts’ reluctance to award damages in these cases may rest partly on the parties’ ability to protect early reliance themselves by using alternative contractual mechanisms. The cases thus raise the question why parties sometimes fail to use these options.

The model in Part III provides an answer, and the case data offer some support for those conclusions. In twenty-five of the thirty-one
cases in which the promisee argued with at least some success that a preliminary agreement bound the promisor to bargain in good faith, the investment patterns of the parties fit the commercial behavior described in the model. In particular, the parties had made a preliminary agreement that committed them to make simultaneous but inchoate relation-specific investments. The reported facts also suggest that the parties' investments became more tangible as the parties made them and as uncertainty was resolved. Finally, attempts at ex post renegotiation failed, apparently because one party delayed its investment or wished to exit the deal while the other did not. The other six cases either did not provide enough factual background for us to determine the pattern of the parties' investments or reflected substantial confusion by the court about the nature of the transaction and the applicable law.

We can better explain the contractual complexity problem that motivates these preliminary agreements by grouping the twenty-five investing cases into two broad categories: investments in joint ventures, partnerships, and distributorships, and corporate financing investments such as acquisitions and capital financing deals. While these case groupings represent quite different commercial patterns, the complexity of the transaction is the factual element that best explains the parties' use of preliminary agreements in both categories.

B. Joint Ventures, Partnerships, and Distributorships

An exemplar of the first investment pattern is Kandel v. Center for Urological Treatment & Research, P.C. In Kandel, a doctor moved his practice and his family from New York to Tennessee to join a physician's group. Dr. Kandel and the Center entered into an employment agreement providing that Dr. Kandel would work for one year, after which the parties would "negotiate in good faith" to permit him to purchase stock in the group. At the year's end, the parties negotiated

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87 Eleven cases involved investments in joint ventures, partnerships, or distributorships, and the other fourteen concerned investments in financing projects.
88 2002 WL 598567.
89 Id. at *1 (internal quotation marks omitted). The contract included the following provision: 10. Agreement to Negotiate in Good Faith Toward Purchase of Equity Ownership. The Employer agrees that in the event Employee remains continuously employed by Employer for a period of one (1) year and has achieved Board Certification through the American Board of Urology, Employer will negotiate in good faith with Employee to allow Employee to purchase from Employer that number of shares of Employer's stock which will permit Employee to own the same number of shares as the stockholder holding the most shares of Employer's stock at that time. Employer anticipates that the purchase price of such stock shall be based on the GAAP book value of the Employer as of the date of the purchase.

Id. (second emphasis added) (quoting the contract between Dr. Kandel and the Center).
but reached an impasse over the financial terms of the partnership.\footnote{See \textit{id.} at *2 ("The parties agreed on many terms of the buy-in, such as the formula to be used in determining the amount of Dr. Kandel’s compensation . . . and the terms of the covenant not to compete. . . . The parties disagreed, however, on the method for calculating the stock redemption value.")}. Subsequently, negotiations ceased and the Center fired Dr. Kandel.\footnote{\textit{Id.} at *3.} He filed suit against the Center and its principals, alleging that the defendants had breached their contract to negotiate in good faith and committed promissory fraud in inducing him to sign the employment agreement. The appellate court affirmed the trial court’s grant of summary judgment in favor of the defendants on both counts, holding that even if Tennessee recognized a cause of action for breach of an agreement to bargain in good faith, the evidence did not demonstrate such a breach and did not establish promissory fraud.\footnote{See \textit{id.} at *7–8.}

In this case, both parties undertook to make simultaneous investments. The Center agreed to make a human capital investment in on-the-job training and access to proprietary information. Dr. Kandel agreed to move to the new practice and make a human capital investment in treating a new set of patients and in learning the defendant’s practice. He was to be paid for the portion of his investment that was contractible — moving costs and salary — but not for his opportunity costs or for his human capital contribution. The expected surplus from both parties’ investments was the marginal increase in the profits from adding Dr. Kandel to the partnership. This surplus was not contractible \textit{ex ante}. However, at the end of the year, and in consequence of both parties’ investment, the surplus probably would be sufficiently tangible for the parties to divide in a renegotiation.\footnote{Tangible evidence of the partnership’s gain would include the accounts receivable generated by Dr. Kandel in the practice as compared with those generated by his peers, evaluations of his performance by patients and other professionals, and the like.}

In \textit{Kandel}, the preliminary agreement was motivated in important part by asymmetric information: Dr. Kandel had private information about his ability, and the partnership had private information about its profitability. The parties’ investments would reveal enough information to make their project tangible and, hence, contractible. The parties appeared to function in a complex environment in which a profitable project may have taken many forms, and the form of the particular profitable project, if any, was unknown \textit{ex ante}.

This pattern of preliminary agreements motivated by complexity appears in a number of cases in the sample. For example, inchoate-ness that results from complexity is reflected in a joint venture to manufacture clothing that required simultaneous investments by the seller in manufacturing capacity and by the buyer in human and fi-
nancial capital, a joint venture to establish a cellular telephone network requiring simultaneous investments in securing FCC approvals and in constructing a prototype, and a distribution agreement for a new product in which the distributor agreed to invest in finding sales locations and the manufacturer agreed to secure financing and approvals.

The outcomes in these cases are often consistent with the recommendations that our model supports. Kandel is illustrative. Dr. Kandel, like the buyer in the model, took a risk. He could have been subjected to holdup after he moved and began to work if the practice group had delayed its investment. But if the practice group anticipated that a court would require reimbursement of Dr. Kandel’s verifiable reliance costs should the group delay its investment, the group would have been motivated to honor its commitment to invest simultaneously. Anticipating the group’s likely behavior, Dr. Kandel would have invested efficiently. Even so, Dr. Kandel would have borne a further risk that, once uncertainty was resolved, his opportunity cost of performing as a partner in the practice exceeded the value of his services to the firm. In that case, trade would be inefficient ex post. Dr. Kandel, if he were sophisticated, would have relocated and joined the practice group temporarily if he expected trade to be efficient ex post given the group’s appropriate simultaneous investment. The law, however, should not give him reason to believe that he would have been compensated if the group did what it should have but his prediction turned out to be wrong. Thus, denying him damages was correct.

Many courts also focus on evidence of a delay in making a simultaneous investment as the key condition for establishing a breach by the promisor of a duty to negotiate in good faith. A case in point is In re Matterhorn Group, Inc. In this case, Swatch wanted to expand its franchise operations to sell watches in the United States. Matterhorn and Swatch signed a letter of intent granting Matterhorn the exclusive franchise for a list of possible locations. The agreement called for Matterhorn to invest in finding appropriate locations for retailing Swatch watches from among thirty possible sites. As Matterhorn filed

97 The court in Kandel found no bad faith. The facts tend to support the inference that trade was inefficient ex post.
98 2002 WL 31528396.
applications for franchises at potentially profitable locations, Swatch agreed to process the applications diligently and to seek financing and approval from its parent firm. Here again, the parties agreed to make a simultaneous investment in a complex project: Swatch was to invest in opportunity costs by granting exclusive rights to Matterhorn and in the human capital needed to process applications and to become familiar with the American business climate; Matterhorn was to make human capital investments in search and information costs. The project — establishing retail sites for selling Swatch watches in shopping malls — could have taken many possible forms, and precisely what form would be profitable could not be specified ex ante. Investment and the passage of time would have revealed which sites, if any, would prove profitable.

In this case, however, Swatch engaged in the strategic behavior that our model predicts: it delayed processing several applications and failed to secure the necessary approvals. The court found Swatch to be in breach of a preliminary agreement to bargain in good faith and awarded Matterhorn reliance damages based on the out-of-pocket costs of investigating the locations in question. The court denied Matterhorn’s claim for expectation damages based on lost profits, holding that “there is no guarantee that it would have opened a store in [that location].”

The result in Matterhorn was correct because, absent a legal rule protecting Matterhorn’s reliance cost, a rational party in Matterhorn’s position would anticipate the risk of ex post holdup and could decline to make the efficient investment. Entering into a written preliminary agreement should have legally committed Swatch to invest as promised and to reimburse Matterhorn’s reliance costs if it did not. The decision did ultimately protect Matterhorn’s reliance interest, but the requirement that the parties bargain in good faith was unnecessary.

99 See id. at *1-4.
100 The court held:

The rejection of the Vail application violated the Letter of Intent. The Letter of Intent granted Matterhorn the exclusive right to negotiate a lease in Vail despite Vail’s geographical distance from Matterhorn’s base of operation in the Northeast. Furthermore, it required Swatch to review the Vail application in good faith... [Swatch] unilaterally rescinded the exclusivity that the Letter of Intent had granted, and Swatch’s [decision] to reject the Vail application was improper.

In addition, Matterhorn sent the Vail letter of intent in late April 1996... Swatch took four months to complete its processing of the application...

Accordingly, Swatch breached the Letter of Intent by rejecting the Vail application for improper reasons.

Id. at *16-17 (footnote omitted).
101 Id. at *17.
C. Acquisitions, Venture Capital, and Secured Debt

The existence of preliminary agreements is less obvious in the second prototype we explore: capital financing through acquisitions, secured lending, or venture capital participations. Nevertheless, a close analysis of these cases reveals a similar commercial pattern. We discuss two examples: simultaneous investment by both parties followed by one party’s decision to exit, and delayed investment by one party followed by its refusal to negotiate further.

An example of the former behavior is illustrated by *Tan v. Allwaste, Inc.* In *Tan*, the plaintiffs were shareholders of Geotrack, a firm engaged in subsurface utility engineering. Allwaste considered acquiring Geotrack. The parties executed a letter of intent providing that “the closing of the purchase was contingent on a ‘satisfactory review’ of Geotrack’s financial statements and its operational practices.” During the due diligence investigation, Allwaste “discovered Geotrack had not remitted payroll and withholding taxes to the Internal Revenue Service for some time.” Allwaste withdrew from further negotiations and was unwilling to buy Geotrack even after Geotrack’s shareholders offered to lower the price.

The simultaneous investment model helps explain the use of preliminary agreements to support such acquisition projects. In this situation, the buyer invests in information costs by undertaking due diligence, and he will be protected if he negotiates for an exclusive dealing clause according to which the seller agrees not to shop for a better deal during negotiations. Thus, the seller makes an opportunity cost investment. This investment and the passage of time together indicate whether a profitable project exists, and they permit the parties to write a contract to pursue it.

In *Tan*, the court analyzed the letter of intent not as a fully binding contract for Allwaste to acquire Geotrack, but as a preliminary agreement obligating Allwaste to negotiate further in good faith. The court concluded that the plaintiffs had provided sufficient evidence for a reasonable jury to conclude that Allwaste backed out of the deal for reasons unrelated to Geotrack’s actions, omissions, or financial...
status. The court thus denied, in relevant part, Allwaste's motion for summary judgment. There was no evidence of delay in investment, however, such as a failure to undertake due diligence pending the resolution of uncertainty. Rather, the evidence suggests that Allwaste found the deal to be inefficient ex post owing to exogenous circumstances. Under these conditions, exposing Allwaste to the threat of a jury finding of bad faith could have motivated inefficient trade ex post or the refusal to enter into potentially profitable negotiations. Therefore, on this understanding of the facts, the decision in Tan was incorrect.

Contrast the commercial behavior in Tan with the behavior in JamSports & Entertainment, LLC v. Paradama Productions, Inc. JamSports, a sporting events promoter, sued AMA Pro Racing for breaching an agreement that would have given JamSports the right to produce and promote the AMA Supercross Series from 2003 to 2009. The parties had signed a letter of intent obligating AMA to negotiate with JamSports exclusively and in good faith for ninety days regarding a promotion agreement. The letter of intent contemplated a simultaneous investment by both parties. AMA was to invest opportunity costs by committing to the exclusivity period, and JamSports under-

109 See Tan, 1997 WL 337207, at *4. In particular, the plaintiffs noted that the acquisition of Geotrack was to be debt free, so Geotrack's tax liability should not have affected Allwaste's analysis of the deal. The plaintiffs also provided evidence that Allwaste had simply decided not to conduct any more acquisitions. Id.

110 Id.

111 Even without a jury verdict, the cost of a trial will likely motivate a defendant in Allwaste's position to settle, and the anticipated costs of settlement may deter efficient exit thereafter.


113 Id. at 828. The relevant portions of the letter of intent read as follows:

AMA Pro Racing, owner of the Supercross Series, and JamSports hereby express their intent to enter into an agreement to promote AMA Supercross events and undertake related sales and marketing matters.

1. Framework. AMA Pro Racing and JamSports shall agree to produce and promote not less than fourteen (14) and up to a mutually agreed upon number of AMA Supercross events per season (currently January 1 through the first week of May) for a seven (7) year period beginning January 1, 2003, with an opportunity to extend the term based on criteria such as operating issues, financial issues, brand development and event attendance and such other criteria as to be further clarified by the parties hereto.

13. Exclusivity. Each of the parties agrees that for a period of ninety (90) days after the date this letter is fully executed by the parties hereto, AMA Pro Racing and JamSports shall negotiate exclusively and in good faith with one another, and neither party shall enter into any discussion or negotiations with any third party with respect to the subject matter herof. If a party hereto shall receive any offer from a third party with respect to the subject matter hereof, the receiving party shall promptly notify the other party hereto of the offer, the name of the offeror and the terms thereof. The parties shall use their best efforts, negotiating in good faith, to enter into the Promotion Agreement within thirty (30) days from the date this letter is fully executed by the parties hereto.

Id. at 828–29 (first and second omissions in original) (quoting the letter of intent).
took to invest in developing a marketing plan for the Supercross series. The price JamSports was to pay for promotion rights depended upon the outcome of both investments. During the agreement’s exclusivity period, Clear Channel, a competing promoter, sent letters to AMA’s board of directors indicating that Clear Channel wanted to continue negotiations for the AMA contract.\(^\text{114}\) AMA failed to disclose this proposal to JamSports, and AMA ultimately entered into a promotional agreement with Clear Channel.\(^\text{115}\)

JamSports alleged that AMA breached the preliminary agreement by entertaining a competing proposal while negotiations were ongoing. The court held that the letter of intent was a binding preliminary commitment to negotiate in good faith and that JamSports had established as a matter of law that AMA breached its exclusivity obligation by failing to advise JamSports of its receipt of the Clear Channel proposal. The court also held that AMA’s insistence on having its parent entity approve the deal, a condition that did not conform to the preliminary agreement, was a breach of the duty of good faith if put forth with “bad intent.”\(^\text{116}\)

*JamSports* illustrates the uncertain grasp that courts exhibit concerning just what behavior constitutes a bad faith failure to negotiate. AMA behaved strategically in the way our model predicts: it delayed its opportunity cost investment and entertained Clear Channel’s proposal without informing JamSports. As it happened, the delay paid off for AMA: it was able to negotiate a profitable deal with Clear Channel. The court correctly held that this behavior constituted a breach of AMA’s duty to negotiate in good faith and allowed JamSports to prove its reliance losses at trial.\(^\text{117}\)

But the court’s further holding that it was a per se violation of the duty of good faith for AMA, with “bad intent,” to insist on new condi-

\(^{114}\) *Id.* at 830.

\(^{115}\) *Id.* at 832, 847.

\(^{116}\) *Id.* at 848. Specifically, the court stated that “AMA Pro’s insistence on material contractual terms or conditions beyond those stated in the letter of intent could constitute a breach of its contractual duty to negotiate in good faith.” *Id.* However, the court concluded:

\[The \text{ fact that AMA Pro insisted upon a significant condition that was not included in} \]
\[the letter of intent [was] not by itself sufficient to demonstrate AMA Pro’s lack of good} \]
\[faith. The concept of good faith appears also to require an inquiry into the breaching} \]
\[party’s intent. As one Illinois court noted in a different context, a “practical, common-} \]
\[sense construction” of good faith is the absence of bad faith or bad intent.} *Id.* at 848 (quoting Dotson v. Former S’holders of Abraham Lincoln Land & Cattle Co., 773 N.E.2d 792, 801 (Ill. App. Ct. 2002)); see also *id.* at 847 (“For instance, a party might breach its obligation to bargain in good faith by unreasonably insisting on a condition outside the scope of the parties’ preliminary agreement, especially where such insistence is a thinly disguised pretext for scotching the deal because of an unfavorable change in market conditions.” (quoting A/S Apothekernes Laboratorium for Specialpraeparater v. I.M.C. Chem. Group, Inc., 873 F.2d 155, 158 (7th Cir. 1989)) (internal quotation marks omitted)).

\(^{117}\) See *id.* at 847-49.
tions during the negotiations is questionable. Parties make preliminary agreements in considerable part because they do not know ex ante just which project from the set of potential projects will turn out to be profitable. If there is a profitable project, the parties will then propose to each other a number of conditions that will advance the pursuit of just that project. Thus, AMA likely would have proposed new conditions to JamSports even if it had invested in the exclusivity period, and those conditions could have included the approval of its parent. The court’s holding that introducing a new condition with “bad intent” was per se bad faith without limiting it to specific situations thus reflected a basic misunderstanding of how parties move from preliminary agreements to final deals. To be sure, there would have been bad faith if AMA had insisted on a new condition as a pretext to support its breach, but other situations do not warrant the “bad faith” categorization.

In sum, our data suggest that modern courts have an intuitive understanding that roughly correlates with the normative conclusions that we formally derive. Courts recognize that they have a role to play in enforcing preliminary agreements. Enforcement of these agreements can motivate a party to invest in an ex ante efficient project despite the fear of being held up should the other party delay his own investment. The cases consistently find that a preliminary agreement, which creates a duty to bargain in good faith, has or reasonably may have been breached when there is a delay in undertaking a promised investment. Moreover, courts also enforce preliminary agreements when the promisor, after delaying her own investment, determines that the deal will be ex post inefficient and exits. Although the project is inefficient ex post, the delaying party should compensate the investing party for verifiable reliance costs.

The courts also appear to have an intuitive grasp of the necessary conditions for finding a preliminary agreement. Consistent with our model, courts generally find preliminary agreements when the parties have agreed on the nature of their project, on the nature of the investment actions that each is committed to undertake, and on the order in which these actions are to be pursued. This baseline for find-

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119 See, e.g., Frazier Indus., L.L.C. v. Gen. Fasteners Co., 137 F. App’x 723, 730-32 (6th Cir. 2005); A/S Apothekernes, 873 F.2d at 160; L-3 Comms’ns, 2005 WL 712232, at *7-8; Bacou-Dalloz USA, Inc. v. Cont’l Polymers, Inc., No. CA 00-404-T, 2005 WL 615752, at *7-11 (D.R.I. Mar. 4,
ing an actionable commitment is independent of many of the factors that have been made doctrinally salient, such as the number of open terms and the extent of part performance.\textsuperscript{120}

The problem revealed by the cases, however, is that no matter how sharp the intuitions of experienced judges are, the lack of a theory that can explain the underlying commercial behavior inevitably leads to errors. First, there is no need for a duty to bargain in good faith: awarding reliance is sufficient to increase efficiency. Second, the duty to bargain in good faith may be unhelpful since courts will sometimes misapply it. For example, the court in \textit{Tan} permitted the jury to find bad faith even when there was no evidence of investment delay and even when the deal apparently would have been inefficient for Allwaste to pursue. And in \textit{JamSports}, a party that breached its obligation to bargain in good faith by delaying investment was also subject to a possible independent finding of bad faith based on the introduction of new conditions during renegotiation. The lesson, in short, is that theory matters. The cases often make sense when one addresses the right questions to them. But absent a theory, even the wisest judges err.

\textbf{V. CONCLUSION}

Parties often make relation-specific investments on the basis of preliminary understandings with the intention of formalizing their relationship later. These investments are lost when the contemplated deal turns out to be unprofitable. In some no-deal cases, a promisee who has sunk costs comes to believe that the promisor treated him unfairly. The promisee was induced to invest by the promisor's assurances, but these assurances were not kept; instead, the promisor either abandoned the deal or attempted to exploit the promisee in a renegotiation. This behavioral pattern has produced hundreds of appellate cases in the last decade alone. It also has been the object of substantial case law and considerable scholarly commentary for an even longer period of time.

Litigation explosions occur in transactional fields such as contracts when the law is obscure, and the law is obscure here. In contrast to the reigning scholarly view, we first show that courts will not award reliance damages unless the parties had settled on sufficient material terms to support an inference that they wanted legal weight to attach

\textsuperscript{120} See supra pp. 675–76.

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to their preliminary agreement. Understanding this rule, however, is a necessary but insufficient condition for providing parties and courts with useful guidance. Substantial confusion remains regarding just how complete a preliminary agreement must be to justify enforcement and just what remedies for breach are appropriate. Indeed, because litigated deals commonly are ex post inefficient, the parties could not have agreed on a complete contract to pursue them. Therefore, it is difficult to envision what behavior would constitute a wrongful breach.

Disputes continue to arise because the foundational questions of intention and remedy are poorly understood. The initial task, then, is to understand why parties sometimes conclude only preliminary agreements, make sunk-cost investments under conditions of uncertainty, and sue each other over deals that they could never have contracted to pursue. We create a model that attempts to answer these questions. It shows that commercial parties sometimes maximize expected surplus by beginning projects that, while promising, are too complex to describe in formal contracts. The parties nevertheless understand what their project will be, what the primary responsibilities of each will be, and the rough order in which their contributions will be made. Commencing to invest in such a potential project may produce two types of gains: accelerating the realization of returns if the project turns out to be profitable, and illuminating which, if any, of the possible projects will be profitable, which in turn makes an efficient project sufficiently tangible to describe in a formal contract.

Typically, there are incentives for parties to engage in strategic behavior when, as in the situations we discuss, little is written down, the behavior of a contract partner is difficult to observe, and the state of the world is uncertain. Strategic behavior in our model takes a particular form: a party who agrees to invest when her partner invests will delay investment to see how things turn out. Delay has two advantages. If the deal turns out to be unprofitable, the party who delays will not have sunk costs in the project. If the project turns out to be profitable and the parties renegotiate to set a price, the faithful party's sunk costs will be ignored in the new bargain, but the unfaithful party will be compensated for costs she must incur to make the project successful. As usual, the main inefficiency is ex ante: a party who anticipates such strategic behavior will decline to make the preliminary agreement, and potentially efficient projects will be forgone.

These conclusions show that the facilitative role for courts is somewhat broader than has previously been appreciated. Courts encourage efficient investment by enforcing contracts, and they encourage the exploration of investment opportunities by not protecting the expectation interest of parties disappointed by the failure to reach agreement. We show here that courts have a further facilitative role: to encourage exploration of investment opportunities by protecting the
promisee's verifiable reliance when the promisor strategically delays investment and thus breaches an ex ante efficient agreement to pursue a potentially profitable deal. Anticipating the availability of a reliance recovery can motivate parties to sink costs in the exploration of possibly profitable ventures and thus will expand the set of efficient contracts that parties can create.

This analysis should help courts for three significant reasons. First, it shows what must be settled for there to be an actionable preliminary agreement: the parties must agree on the type of project, such as a shopping center or a financing; on an imprecise but workable division of authority for investment behavior; and on the rough order in which their actions are to be taken. These three conditions are each necessary and together sufficient. Second, the analysis clarifies that a deviation from the agreed investment sequence is a breach. Third, it recognizes that the law has two related goals: to deter strategic behavior and to encourage investment. These goals are advanced by awarding the faithful party her verifiable reliance costs if the other has wrongfully delayed investment. There is no need to protect the promisee’s expectation, which would be difficult to do in any event for projects that never get past the preliminary stage.

We test our analysis against a large sample of reported cases. The sample offers some evidence that parties are motivated in the ways we identify and breach for the reasons we uncover. Reported cases provide a weak foundation for empirical conclusions, but they should be taken as persuasive initial evidence when the theory is plausible and there is little competing evidence. The cases also show that some courts respond as if they were attempting to implement our policy proposal. In particular, these courts award reliance damages to promisees if the promisors breached the preliminary agreement and failed to bargain in good faith over exit conditions. Our analysis indicates that although awarding reliance damages for the breach of a preliminary agreement is efficient, imposing a further duty that parties should bargain over the remaining terms in good faith is unnecessary. To the extent that courts continue to impose the duty to bargain in good faith before preliminary deals are abandoned, we make the duty more concrete by specifying what the parties should bargain about: they should discuss the content of the preliminary agreement, whether there was a breach, and what the damages should be, but they need not bargain about whether to pursue the project.

121 The rule we propose is only a default. Parties who are concerned that a court may award reliance too frequently, even if it uses the criteria for a preliminary agreement that we develop, can contract out by stating that no liability will attach to any statements or representations unless they are included in a formal written contract.
Our analysis also shows that courts sometimes make mistakes, however, either by not enforcing preliminary agreements or by adopting an imprecise and overly broad definition of bad faith when they do enforce them. Thus, our primary contribution is normative: we offer a framework for treating early reliance cases that, we argue, would improve efficiency if courts were to adopt it.

APPENDIX

In this Appendix, we consider whether awarding a buyer his verifiable costs when the seller breaches an agreement to invest simultaneously can cause the buyer to overinvest. There is no analytic answer to this question: the buyer will overinvest for certain values of the relevant variables and will underinvest for others. We show by example that the buyer will underinvest unless the verifiable fraction of his costs is improbably large and the probability that the seller will breach is unrealistically high.

Investment in our model is exploratory: the parties investigate whether they have a good project or not. Thus, it is natural to assume that an initial investment affects the probability that a successful project will turn up rather than the returns from the project itself; later investment will affect those returns. Formally, then, we assume that the probability of success $p(x_b, x_s)$ is a function of both parties' initial investments and is twice differentiable, nondecreasing in both variables, and concave:

$$p'_i = \frac{\partial p(x_b, x_s)}{\partial x_i} \geq 0,$$

$$p''_{ii} = \frac{\partial^2 p(x_b, x_s)}{\partial x_i^2} \geq 0,$$

and

$$p''_{bb} p''_{ss} - p''_{bs} \geq 0,$$

where

$$p''_{bs} = \frac{\partial^2 p(x_b, x_s)}{\partial x_b \partial x_s}.$$

Investment is efficient if $p(x_b, x_s) \cdot \delta^2 S + (1 - p(x_b, x_s)) \cdot 0 - x_b - x_s > 0$.

To see that the buyer commonly will underinvest, first consider the buyer's expected return in the simultaneous regime: $p(x_b, x_s) \delta S / 2 - x_b$. Eliminating the discount factor for convenience, the buyer should in-
vest until the expected marginal return equals the marginal cost—that is, until \( p'_b(x_b, x)S = 1 \), but the buyer’s actual first-order condition is \( p'_b(x_b, x)S / 2 = 1 \). The buyer underinvests in the simultaneous regime because his marginal return is diminished by the seller’s discounted share. The fraction \( 1 / 2 \) is the holdup tax.

Now turn to the sequential regime and assume that the buyer can recover the verifiable portion of his investment costs. His return then is \( p(x_b, x)(\delta' S - \delta x) / 2 - (1 - \alpha_b)x \). Again eliminating the discount factor, the first-order condition is \( p'_b(x_b, x)(\delta' S - \delta x) / 2 = (1 - \alpha_b)x_b \). The buyer recovers \( \alpha_b \) of his costs, so the term \( 1 - \alpha_b \) represents the portion he bears. The holdup tax—the left hand side—is higher in the sequential regime because the buyer’s return is reduced by the seller’s costs. The breach subsidy, however, offsets the buyer’s incentive to underrely to some extent.

We create an example to see whether the breach subsidy will cause the buyer to overinvest. In the example, the seller’s costs reduce the expected surplus \( S \) by \( 20\% \), and in the sequential regime the holdup tax is \( 60\% \). Again, we ignore the discount rate for simplicity. The buyer thus would invest efficiently if the breach subsidy were \( p'_b(x_b, x)(0.4S) = 1 - 0.6 \), or \( p'_b(x_b, x)S = 1 \). The buyer therefore would not overrely in the sequential regime on the assumed parameters unless \( \alpha_b \) exceeded \( 60\% \). For example, if \( \alpha_b \) were 0.75, then \( p'_b(x_b, x)(0.4S) = 1 - 0.75 \), and therefore the buyer overinvests because \( p'_b(x_b, x)S = 0.625 \). As for how much, the marginal dollar of revenue is reduced by the holdup tax, but the marginal dollar of cost is reduced by the breach subsidy. When the holdup tax is \( 60\% \) and the breach subsidy is \( 75\% \), the buyer will overrely by the difference of \( 15\% \).

The issue is not whether the buyer will invest too much in the sequential regime. Rather, the issue is whether the buyer will overinvest after making a preliminary agreement to invest simultaneously and when his costs will be subsidized only if the seller breaches. In the simultaneous regime, the buyer pays a holdup tax—his marginal return is reduced by \( 50\% \)—and he must bear all of his costs. Suppose, then, that the buyer believes the seller will breach with a \( 25\% \) probability. The net expected effect on the buyer’s marginal dollar of investment is the expected value of the holdup tax when the seller complies and the expected value of the combination of the holdup tax and the breach subsidy when the seller breaches. In the example when \( \alpha_b = 0.75 \), the net expected effect is \( 0.25 \cdot 0.15 + 0.75 \cdot (-0.5) = -0.3375 \). The first term is the probability that the buyer would be in the sequential regime (0.25) multiplied by the net incentive to overrely in that regime (0.15); the second term is the probability that the buyer will be in the simultaneous regime (0.75) because the seller will comply multiplied by the incentive to underrely as a result of the holdup tax (−0.5). The buyer will underrely because the net expected effect on his marginal incentive is negative.
In this example, when 75% of the buyer's costs are verifiable and the seller is expected to breach with a fairly high probability, the holdup tax still causes the buyer to underinvest by a substantial amount. This result makes intuitive sense because, in the sequential regime, the breach subsidy is offset by a large holdup tax while in the simultaneous regime, there is no subsidy and the holdup tax remains large. In addition, since a party is reluctant to deal with a partner who is likely to breach, the defection probability — the probability that the buyer will be in the sequential regime — commonly is much lower than 50%. For these reasons, the buyer puts much more weight on the simultaneous regime, in which he is not subsidized, than on the sequential regime, in which he is subsidized when the seller breaches. The net effect causes the buyer to underinvest. Thus, the breach subsidy we recommend can cause overinvestment only if an improbably large fraction of the buyer's costs are verifiable and the seller is expected to breach an unrealistically high percentage of the time.