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The Law and Economics of Preliminary Agreements

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Abstract: Contract law encourages parties to make relation-specific investments by enforcing the contracts the parties make, and by denying liability when the parties had failed to agree. For decades, the law has had difficulty with cases where parties sink costs in the pursuit of projects under agreements that are too incomplete to enforce, and where one of the parties prefers to exit rather than pursue the contemplated project. The issue whether to award the disappointed party any remedy has divided a large number of courts over many years. The judicial uncertainty arises, we claim, because the questions why parties make such incomplete contracts, then rely before uncertainty is resolved and finally disagree over cost reimbursement when both recognize that their project would be unprofitable have not been satisfactorily answered. We create a model which shows that parties create “preliminary agreements” rather than complete contracts when the project they explore could take a number of forms, and the parties are unsure at the outset which form would maximize profits. A preliminary agreement roughly allocates investment tasks between the parties, specifies investment timing and commits the parties only to pursue a profitable project. Parties sink costs in a project because investment accelerates the realization of returns and illuminates whether any of the possible project types would be profitable. 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 improves this party’s bargaining power in the renegotiation to a complete contract if a project would succeed. Delay often disadvantages the promisee, but the main inefficiency is ex ante: When parties anticipate such strategic behavior, the likelihood that they will make preliminary agreements is materially reduced. This is unfortunate because the performance of a preliminary agreement often is a necessary condition to the creation of a complete contract and the subsequent realization of a socially efficient opportunity. Thus, contract law should encourage relation-specific investment by awarding verifiable reliance costs to a party to a preliminary agreement if its partner has strategically delayed investment. We also study a large sample of appellate cases that deal with reliance prior to the signing of a complete contract. This study reveals that (a) parties appear to make the preliminary agreements we describe and breach for the reasons our model identifies; and (b) courts sometimes protect the disappointed party’s reliance interest when they should, but the courts’ imperfect understanding of the parties’ behavior causes courts to make mistakes.
THE LAW AND ECONOMICS OF PRELIMINARY AGREEMENTS
Alan Schwartz* and Robert E. Scott**

I. INTRODUCTION

For at least 50 years, a particular pattern of commercial behavior has engendered considerable litigation and substantial scholarly commentary. Two commercial parties agree to attempt a transaction, and agree also on the nature of their respective contributions, but neither the transaction nor what the parties are to do are precisely described, and may not be written down. The parties do not agree (they may not attempt to agree) on important terms such as the price. After the parties agree upon what they can agree upon and before uncertainty is resolved, one or both of them make a sunk cost investment.¹ This pattern of commercial behavior suggests that the parties have made a “preliminary agreement” that has two legally salient understandings: First, if a transaction turns out to be profitable after uncertainty is resolved, the parties will make their agreement more concrete, and then conduct the transaction. Second, if a transaction turns out to be unprofitable, the parties will abandon the project. After investment, and when the parties observe the ex post state of the world, one of three events occurs: (1) The parties write the complete contract and carry out the deal; (2) The parties agree not to do the deal; (3) One party abandons the project, so it is not pursued, but the other party protests the fact or the circumstances of the first party’s exit. In particular, either the disappointed party prefers a deal to no deal, or the disappointed party believes that it is entitled to compensation for acquiescing in exit while the other party believes that it is entitled to exit without liability.

¹A sunk cost or relation specific investment is partly or totally nonredeployable. For example, steel rods ordered for a project are redeployable because a party can sell them on the market; rods that are fabricated into particular shapes would not be redeployable if the shapes were specific to the contract parties’ needs.
This third event produces a large amount of litigation. Courts must then decide whether to protect the promisee’s expectation, or to reimburse the promisee’s sunk costs (to protect his reliance interest), or to award him nothing. The cases have been divided regarding these alternatives, but a modern rule appears to be emerging. Under this rule, the initial issue is whether the evidence will sustain a finding that the parties have reached the first understanding implicit in a preliminary agreement: that is, that they had agreed to pursue the deal if it turned out to be profitable. If this finding is supported, the court will require the parties to bargain in good faith to resolve their dispute. Should the promisor – the party who prefers to exit – fail to bargain in good faith, she will be liable for the promisee’s reliance expenditures. The parties are not required to agree to a deal, however, because of the second understanding implicit in their preliminary agreement: that they would abandon the project if it turned out to be unprofitable.

We can be somewhat more precise both about the commercial pattern and the emerging legal rule. Parties will have made a “fully binding contract” when they have agreed on all material terms and realized 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: (1) The parties have not agreed to a deal, but have only discussed a deal. In this event, the disappointed party can recover nothing. (2) The parties have agreed on all material terms, and

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

3 The legal rules that have evolved to respond to these problems 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 contract had been made. The promisee typically alleges multiple grounds for relief including misrepresentation, unjust enrichment, promissory estoppel, implied contract and breach of an obligation to bargain in good faith. These arguments often fail, but sometimes succeed. Traditional scholars ask whether courts correctly apply the various legal doctrines on which promisees attempt to rely. See, e.g., E. Allan Farnsworth, Precontractual Liability and Preliminary Agreements: Fair Dealing and Failed Negotiations, 87 Colum. L. Rev. 217 (1987). More recently, law 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. 485 (2001); Jason Scott Johnston, Communication and Courtship: Cheap Talk Economics and the Law of Contract Formation, 85 Va. L. Rev. 385 (1999); Richard Craswell, Offer, Acceptance and Efficient Reliance, 48 Stan. L. Rev. 481 (1996); Avery W. Katz, When Should an Offer Stick? The Economics of Promissory Estoppel in Preliminary Negotiations, 105 Yale L. J. 1249 (1996).

4 In the absence of sufficient evidence that the parties intended to be legally bound in some way, courts conclude that the parties have merely engaged in preliminary negotiations. Courts generally deny liability for reliance on preliminary negotiations absent misrepresentation, express promise or similar inducement. For a recent
intended 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. (3) The parties have made a preliminary agreement as defined above; that is, 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. The emerging legal rule requires parties to such preliminary agreements to bargain in good faith over open terms. In this article, we ask whether the new rule governing these binding preliminary commitments is justifiable.

The normative question is unresolved because the positive question – why parties engage in these transactions – also is unresolved. A decision maker 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: First, parties often write complete contracts, or as complete contracts as they can, before they make relation specific investments. Why do parties in this context make preliminary agreements? Second, while 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

example, see PFT Roberson, Inc., v. Volvo Trucks North America, 420 F3d.728 (7th Cir. 2005). See also TAN infra.


This rule originated with the opinion by Judge Leval in Teachers Ins. & Annuity Assoc. v. Tribune Co., 670 F. Supp. 491 (S.D.N.Y. 1987). Currently, the Leval framework has been followed in at least thirteen states, sixteen federal district courts and seven federal circuits. See TAN infra. Disputes in cases when the parties agreed on all material terms but also agreed to memorialize their agreement in a more formal document arise primarily because parties failed to express clearly their intention as to when their arrangement would be legally enforceable. In contrast, disputes over “binding preliminary commitments” – the preliminary agreement we analyze – arise where the parties agree on certain terms but leave possibly important terms open to further negotiation. This requires courts to determine whether such an agreement had been made, what the duty to bargain in good faith entails, and which remedy should be awarded for breach of that duty.
Litigated preliminary agreements do not settle the issue of reimbursement for sunk costs when deals are abandoned. In Avery Katz’s interesting article, a party relies early because the value of the contemplated project declines over time but the parties do not contract because an exogenous event – an embargo, for example – made contracting infeasible. See Avery Katz, *When Should an Offer Stick? The Economics of Promissory Estoppel in Preliminary Negotiations*, 105 Yale L. J. 1249 (1996). The parties, however, could have written a force majeure clause, which would have regulated their affairs if the event occurred. Also, Katz implicitly assumes that reliance is verifiable to a court; otherwise, a court could not protect the promisee’s reliance interest. If parties expect that reliance is verifiable, however, they can contract on reliance initially; that is, the promisor can purchase the promisee’s investment by agreeing to compensate him if a deal turned out to be impossible. In Lucian Bebchuk and Omri Ben-Shahar’s model, reliance also is verifiable and thus the parties could have contracted on reliance directly. Moreover, there is no explanation as to why the parties in their model relied before uncertainty was resolved. See Bebchuk and Shahar, supra note 3

These three questions are related but our article is the first to address them as a set. In the model we analyze, the parties cannot write a complete contract at the outset because 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. Parties invest in the interim period for two reasons: (a) Early investment accelerates the realization of returns. The sooner the factory is built, the earlier profits will be realized; and (b) 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. The combination of increased knowledge about a project’s prospects that investment yields, and knowledge of the state of the world in which any project must be pursued that time reveals,

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7Litigated preliminary agreements do not settle the issue of reimbursement for sunk costs when deals are abandoned.

8In Avery Katz’s interesting article, a party relies early because the value of the contemplated project declines over time but the parties do not contract because an exogenous event – an embargo, for example – made contracting infeasible. See Avery Katz, *When Should an Offer Stick? The Economics of Promissory Estoppel in Preliminary Negotiations*, 105 Yale L. J. 1249 (1996). The parties, however, could have written a force majeure clause, which would have regulated their affairs if the event occurred. Also, Katz implicitly assumes that reliance is verifiable to a court; otherwise, a court could not protect the promisee’s reliance interest. If parties expect that reliance is verifiable, however, they can contract on reliance initially; that is, the promisor can purchase the promisee’s investment by agreeing to compensate him if a deal turned out to be impossible. In Lucian Bebchuk and Omri Ben-Shahar’s model, reliance also is verifiable and thus the parties could have contracted on reliance directly. Moreover, there is no explanation as to why the parties in their model relied before uncertainty was resolved. See Bebchuk and Shahar, supra note 3
makes a profitable project sufficiently tangible to support a complete contract.\(^9\)

Finally, to see how a promisee can have a justifiable grievance, note 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. An efficient preliminary agreement to invest simultaneously may be unstable, however. This is because the promisor has an incentive to defect by waiting until after the promisee has invested. The promisor may benefit from defection in either of two ways: (a) If the project turns out to be unprofitable, the promisor will not have sunk costs in a losing deal, and (b) If the project turns out to be profitable, the parties’ complete contract will have to compensate the promisor for the investment costs the contract will require her to make, but that contract need not reimburse the promisee for costs he has already incurred. When the preliminary agreement requires simultaneous investment, a promisor who defects by delaying his investment has forced the promisee involuntarily into the relatively disadvantageous sequential investment regime. We characterize such behavior by the promisor as a breach. Promisees can reasonably expect their promisors not to breach.

This formal analysis supports several normative implications. The most notable is that it sometimes is efficient to protect the promisee’s reliance interest. More precisely, in order to encourage parties to make preliminary agreements and to deter strategic behavior, contract law should permit a promisee to recover sunk costs if his promisor deviated from an agreed investment sequence.\(^10\) 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 contexts under study, there is no complete contract to enforce.\(^11\)

\(^9\)The model we analyze thus attempts to answer, in the preliminary agreement context, an important contract theory question: “What can contracts achieve when actions are contractible ex post but not ex ante, especially in ‘complex’ environments?” PATRICK BOLTON & MATHIAS DEWATRIPONT, CONTRACT THEORY 572 (2005).

\(^10\)Sunk costs, we argue below, often become more tangible as projects proceed.

\(^11\)Complete contracts do not exist in the appellate cases.
Our model also implies, however, that the cases are deficient in important respects. The courts require parties to a preliminary agreement to bargain in good faith, but this requirement is unnecessary; efficiency is sufficiently enhanced if the law were simply to protect the promisee’s reliance. Even if the duty to bargain is thought 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. The parties thus should bargain over whether a timing promise had been breached, and if so what fraction of the injured party’s reliance should be reimbursed. But a promisor’s refusal to discuss whether or not 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 not otherwise).

Moreover, the cases are unclear as to when the parties have made a preliminary agreement. The distinction between whether there was a preliminary agreement or no agreement should not turn on whether the contract has a price or indicates agreement upon a “sufficient” number of terms. Rather, a binding preliminary commitment should be found when (1) the parties have agreed in broad terms on engaging in a joint project; (2) they have divided the investment tasks, even though on a high level of abstraction (John is to prepare a construction site and Mary is to solve the supplier problem); and (3) most importantly, they 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 as to 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 have gone so far had they no such intention.12

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12The phrases simultaneous and sequential investment are partly metaphoric in the analysis here. Our model applies whenever both parties’ investments are needed to make a project successful but one of them has a greater ability than the other to delay a material portion of her work. If the parties agree to invest at about the same time, substantial delay by the party whose investment could be delayed should ground a reliance recovery by the other party.
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 preliminary agreements. This Part shows that courts require some joint intent to be bound before awarding any damages. Part III sets out and solves a model of the commercial pattern described above. We show how the model answers the three positive questions, and formally derive the normative implications just summarized. Part IV applies the model to a sample of the leading cases, in order to evaluate the fit between the model and the commercial patterns revealed in court opinions and to consider how our normative recommendations were (and should have been) applied. Part V is a conclusion that briefly highlights our principal result: Courts can facilitate commercial behavior not only by enforcing complete contracts, but also by attaching legal weight to preliminary agreements. These agreements commonly are exploratory: that is, the performance of a preliminary agreement sometimes is a necessary condition for parties later to pursue an efficient project.

II. THE LAW OF PRELIMINARY AGREEMENTS

A. Rethinking Conventional Wisdom.

The conventional wisdom among contemporary scholars is that courts will impose liability for reliance investments undertaken prior to any agreement between the parties.13 Treatise writers identify as grounds for such enforcement the existence of unjust enrichment, a specific promise made and relied upon during the negotiation process, and a “general obligation arising out of the negotiations themselves.”14 But even a casual survey of contemporary case law casts significant doubt on the accuracy of the conventional view. Courts actually make some form of agreement a necessary condition to promisee recovery. 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.

13See e.g., E. Allan Farnsworth, Precontractual Liability and Preliminary Agreements: Fair Dealing and Failed Negotiations, 87 Colum. L. Rev. 217 (1987). (“In recent decades, courts have shown increasing willingness to impose precontractual liability.”); Michael B. Metzger & Michael J. Phillips, The Emergence of Promissory Estoppel as an Independent Theory of Recovery, 35 Rutgers L. Rev. 472, 496-97 (1983) (“[I]t is clear that promisee estoppel has been used to enforce promises too indefinite or incomplete to constitute valid offers.”).

14Farnsworth, Precontractual Liability, supra note15, at 229-243.
Much of the confusion can be traced to the frequently taught case of *Hoffman v. Red Owl Stores*.\(^{15}\) Hoffman and Red Owl engaged in extensive negotiations and preparations aimed at Hoffman opening a Red Owl franchise. In the course of these negotiations, Red Owl officials recommended that Hoffman take numerous financial and nonfinancial actions. He followed these recommendations because the officials also assured him that $18,000 would be a sufficient capital investment. 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. The court found as a fact that the parties never reached agreement on essential factors necessary to establish a contract. As examples, they had yet to agree 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. Indeed, the parties never agreed on just what was meant by the statement that $18,000 of capital would be sufficient to award Hoffman the franchise.\(^{16}\) Thus, the court held, there could not be basis of the bargain liability. Nevertheless, the court permitted Hoffman to recover sunk costs based on the doctrine of promissory estoppel, as expressed in §90 of the Restatement of Contracts.\(^{17}\) The court held that under this doctrine, a “promise” – here Red Owl’s assurances that a deal would be forthcoming – need not be as definite in its terms as a promise that is the basis of a traditional bargain contract.\(^{18}\)

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\(^{15}\) 133 N.W. 2d 267 (1965).

\(^{16}\) A review of the trial transcript in the *Hoffman* case shows that the parties’ minds never met regarding the composition 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 in order 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 minimum 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* (mimeo 2006).

\(^{17}\) The court based its decision on §90 of the first Restatement of Contracts. But the differences between the first and second restatement versions of §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.

\(^{18}\) 133 N.W. 2d at 275. Specifically, the court held:

If promissory estoppel were to be limited only to those situations where the promise giving rise to the cause
Nothing in the law of contracts supports this legal analysis. To the contrary, the Restatement has only one definition 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.\textsuperscript{19} \textit{Hoffman} thus is wrong as a matter of doctrine.\textsuperscript{20} More importantly, it is an outlier; the case has not been followed in its own or other jurisdictions.\textsuperscript{21}

\textsuperscript{19} See e.g., Restatement §§2 and 90. (Restatement §2 defines a \textit{promise} as a manifestation of an intention to be bound that justifies the promisee in believing a commitment has been made. Restatement §90 begins “A \textit{promise}....”). Several scholars have noted the weak doctrinal basis for the \textit{Hoffman} decision, in particular the absence of a finding that Red Owl officials made any specific promise to Hoffman. See Edward Yorio and Steve Thel, \textit{The Promissory Basis of Section 90}, 101 Yale L.J. 111, 143 (1991); Mark P. Gergen, \textit{Liability for Mistake in Contract Formation}, 64 S. Cal. L. Rev. 1, 34-36 (\textit{Hoffman} best explained as liability for negligent misrepresentation); CHARLES FRIED, \textit{CONTRACT AS PROMISE} 24 (1981) (same).

\textsuperscript{20}Commentators have offered alternative theories of liability that would support the \textit{Hoffman} result. Some have argued that the decision can be grounded in a new duty to bargain in good faith. See, e.g., Duhl, supra note __, at 315-21; PATRICK ATIYAH, PROMISES, MORALS, AND LAW 80-92 (1981); Charles Knapp, \textit{Enforcing the Contract to Bargain}, 44 N.Y.U. L. Rev. 673, 686-90; Robert Summers, \textit{Good Faith in General Contract Law and the Sales Provisions of the Uniform Commercial Code}, 54 Va. L. Rev. 195, 225 (1968). This theory is embarrassed by the absence of any evidence of bad faith by Red Owl officers. At most, Red Owl’s agent was careless in not inquiring further as to what Hoffman meant when he said he could contribute about $18,000. Hoffman, however, was much more careless than this 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 repay 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 claim that authorized 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 since by his actions Hoffman gave Red Owl valuable information regarding his future prospects as a franchisee. There are many problems applying either of these theories in arms 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 where the party making the statement possess unique or specialized expertise or is in a special relationship of trust and confidence with the injured party such that this party could justifiably rely on the misstatement. See, e.g., Eternity Global Master Fund, Ltd. v. Morgan Guar. Trust Co. Of N.Y., 375 F. 3d 168 (2d Cir. 2004). Similarly, unjust enrichment claims rarely succeed unless the defendant specifically and wrongfully induced the benefit. A claim for unjust enrichment does 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.” See e.g., First National Bank of St. Paul v. Ramier, 311 N.W. 502, 504 (Minn. 1981); Greg Fimon v. Kenroc Drywall Supplies, Inc., 203 Minn. App. Lexis 311 (Minn 2003). Scott, \textit{Myth}, supra note 18, at 23-27.

\textsuperscript{21} Farnsworth, supra note 16.
Thus, a recent case applying the Wisconsin law that governed *Hoffman* refused to award reliance damages on a promissory estoppel claim under similar facts; rather, the court required evidence that the defendant had induced a benefit by trick. Courts in other jurisdictions have established similarly strict limitations for imposing promissory liability based on representations made during the negotiation process.

In order more systematically to evaluate how contemporary American courts actually treat reliance investments made before the parties have written a complete contract, we began with a sample of 140 cases litigated between 1999 and 2003. Thirty-two cases turned on issues tangential to our inquiry. Thirty of the remaining cases raised the issue of reliance in the context of on-going negotiations. The underlying question was whether the plaintiff could recover reliance costs if the parties had reached no agreement at all. The courts denied liability, whether premised on promissory estoppel or on quantum meruit, in 87% of these preliminary negotiation

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22 Beer Capitol Distributing, Inc. v. Guinness Bass Import Co., 290 F.3d 877 (7th Cir. 2002) (denying both promissory estoppel and unjust enrichment claims based on reliance during negotiations on defendant’s representation that he would recommend that plaintiff be chosen as the exclusive distributor for southeastern Wisconsin). See also Lake Michigan Contractors, Inc. v. The Miniowoc Company, Inc., 2002 U.S. Dist. Lexis 9547 (W.D. Mich 2002) (plaintiff’s promissory estoppel claim fails because the evidence regarding the parties objective manifestations demonstrates that there was no meeting of the minds between the parties on a “not to exceed” agreement).

23 In R.G. Group v. Hrn & Hardart Co., 751 F.2d 69,71 (2d Cir. 1984), the court underscored the baseline requirement that a claim for promissory estoppel for early reliance requires a “clear and unambiguous promise; a reasonable and foreseeable reliance by the party to whom the promise is made; and an injury sustained by the party who has relied.” In denying liability, the court found that the entire history of the parties’ negotiations made it plain that any promise or agreement at that time was conditional upon the signing of a written contract.....Plaintiff manifestly cannot make an end run around the defendant’s reservations against undertaking a legal obligation absent a signed contract by recharacterizing the claim as one of promissory estoppel.


24 We examined all public data bases for preliminary negotiation and preliminary agreement cases proceeding under the following theories of liability: promissory estoppel, quantum meruit, implied contract, definiteness and intent to be bound. The final sample of 140 cases represented 29 state jurisdictions, 19 federal district courts and seven federal courts of appeal.
In the remaining seventy-eight cases, the parties had agreed on at least some material terms. In twenty-nine cases, the court nonetheless denied recovery because the parties had indicated, either expressly or by implication, that they did not intended to be legally bound. They data thus show that, absent misrepresentation or deceit, there generally is no liability for reliance investments made during the negotiation process.

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26 “It is fundamental to contract law that mere participation in negotiations and discussions does not create a binding obligation, even if agreement is reached on all disputed terms. More is needed than agreement on each detail, which is over all agreement to enter into the binding contract.” Teachers Insurance and Annuity Association of America v. Tribune, 670 F. Supp. 491, -- (S.D.N.Y. 1987); See also, ReproSystem, BV v. SCM Corp., 727 F. 2d 257 (2d Cir. 1984).


It is noteworthy that, of the twenty-nine cases denying enforcement because the agreement was too indefinite or the parties had expressed an intention not to be bound, only two authorized restitutionary relief for the plaintiff. The conventional view has been that a promisee can recover in restitution for partial performance of an indefinite agreement. E. Allan Farnsworth, Contracts §3.30 (3d ed. 1999) (citing Bragdon v. Shapiro, 77A.2d 598 (Me. 1951) in which the court permitted an employee to recover in quantum meruit for the value of extra efforts induced by his employer’s promise to share the resulting profits).
In thirty-seven cases, the court held that the parties had made a complete contract, although they contemplated a further memorialization of terms, because the evidence showed that the formal writing was not essential. Finally, and most interestingly, in twelve cases, the court found a preliminary agreement to negotiate further in good faith.

To summarize, courts will not grant recovery for “early reliance” unless the parties, by agreeing on something significant, have indicated their intention to be bound. Put more directly, the cases do not revolve around preliminary negotiations, but rather around preliminary agreements. 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: (1) What criteria do courts use to decide whether or not parties have made an enforceable preliminary agreement? and (2) What does enforcement entail? We turn in the next section to an examination of the evolving legal doctrines that affect these questions.

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30Courts 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, whether the contract has few or many details and whether the amount involved is large or small. Mississippi & Dominion S.S. Co. v. Swift, 29 A. 1063, 1067 (Me. 1894); Restatement(Second) §27, comment c.
B. The Enforcement of Preliminary Agreements

The initial issue, in these cases, is whether the parties have manifested assent to an exchange.\(^{31}\) The manifestation of assent must be such as to ground an objective belief by each party that the other has made a promise.\(^{32}\) This condition requires representations to be sufficiently clear and definite as to constitute what a reasonable person would consider a commitment.\(^{33}\) By definition, therefore, a manifestation of intent that is uncertain or indefinite cannot qualify as a promise.\(^{34}\) And if the parties have not yet made a commitment, their negotiations are regarded as preliminary, and reliance incurred in the course of them is not recoverable.

The common law has had the most difficulty 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 so that a court may ascertain the parties’ intentions with a reasonable degree of certainty.\(^{35}\) This principle rests on the understanding that parties write contracts in important part to enable a party who feels herself unjustifiably disappointed to invoke the law’s aid. It follows that parties did not intend to invoke the law – i.e., did not intend to be legally bound – when their agreement was so vague or lacked

\(^{31}\) See Restatement (Second) of Contracts §§17 & 18 (1981) [hereinafter Restatement]. The manifestation of assent can be oral (unless the Statute of frauds is relevant) and it can be by conduct as well as by words. See Restatement §19.

\(^{32}\) Restatement §3. A promise, in turn, is determined by a party’s objective rather than her subjective belief. See, e.g., Hotchkiss v. National City Bank of New York, 200 F. 287, 293 (S.D.N.Y. 1911) L. Hand J.) We put aside for purposes of this analysis unilateral promises that are exchanged for a performance.

\(^{33}\) See Restatement §3.

\(^{34}\) Restatement §33. See, e.g., Pappas V. Bever, 219 N.W. 2d 720 (Iowa 1974).

\(^{35}\) See e.g., Varney v. Ditmars, 217 N.Y. 223, 111N.E. 822 (1916); Joseph Martin, Jr., Delicatessen, Inc. v. Schumacher, 52 N.Y. 2d 105, 417 N.E. 2d 541 (1981); WILLISTON ON CONTRACTS, VOL. I, §§ 37 et seq.
so many terms that a court could not know what remedy to award.\textsuperscript{36} On the other hand, 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.\textsuperscript{37} The focus on the parties’ intentions – permitting parties to determine just when their agreement has become binding – permits 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.”\textsuperscript{38}

Recently, in a major shift in doctrine, courts have relaxed the knife edge character of the common law by which parties are fully bound or not bound at all. Instead, a new default rule is emerging to govern cases where the parties contemplate further negotiations.\textsuperscript{39} The default starts with the presumption that “preliminary agreements” typically do not create binding contracts.\textsuperscript{40} This presumption follows the common law approach and, as said, rests on the view that courts should not hold parties to contracts unless the parties intended to make them. On the other hand, as our model will show, welfare gains result from attaching some legal force to preliminary agreements that were intended to bind despite the need for further negotiation.\textsuperscript{41} The new default

\textsuperscript{36} For example, in Petze v. Morse Dry Dock & Repair Co., 125 App.Div. 267, 109 N.Y.S. 328, 331, the New York court held that an agreement providing: “the method of accounting to determine the net distributable profits is to be agreed upon later” was unenforceable under the indefiniteness rule. Courts thereafter have held consistently that such “agreements to agree” are unenforceable so long as any essential term is open to negotiation. ROBERT E. SCOTT & JODY S. KRAUS, CONTRACT LAW AND THEORY 34-44, 322-325 (3D ED. 2002).

\textsuperscript{37}Courts will infer an intent to be bound although some terms in the agreement have been left open. For example, UCC §2-204(3) provides that an agreement is a fully binding contract even if the parties failed to agree on certain terms if the parties intended to be legally bound and if they had agreed on enough terms to permit the court to grant an appropriate remedy in case of breach. The Code also follows the common law cases holding that price terms in sales contracts can be supplied from evidence of market prices. Thus, UCC §2-305 permits parties to conclude a sales contract though they have not agreed on a price, or they agreed to agree on a price but subsequently could not do so. Under the UCC, 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. That is what many courts have done.

\textsuperscript{38} Winston v. Mediafare Entertainment Corp., 777 F.2d 78, 80 (2d Cir. 1985).

\textsuperscript{39}As note 6, supra, indicates, this rule was developed by Judge Leval and has been followed extensively.

\textsuperscript{40}See also R.G Group Inc., supra note 24, at 74.

\textsuperscript{41}When the parties have agreed upon everything important – when they have made what courts call a fully binding agreement – the courts will enforce the disappointed promisee’s expectation. See Adjustrite, supra note – at 548; Hyman Gorodensky, H&H Warehousing Co. v. Mitsubishi Pulp Sales (MC) Inc., 92 F. Supp. 2d 249, 254-55
is partly responsive to this showing because it holds that parties to such a preliminary understanding “accept a mutual commitment to negotiate together in good faith in an effort to reach final agreement.”\(^{42}\) 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. A federal court recently referred to this way of enforcing preliminary agreements as “the modern trend in contract law.”\(^{43}\)

In sum, the cases in our sample raise the dual questions of when should preliminary agreements be enforced and what precisely is meant by enforcement. The doctrinal key to the enforcement of these agreements is the parties’ intent. Courts honor express reservations of intention as well as statements of an intention to be fully bound. The major doctrinal development is that modern courts have recognized a further obligation to implement parties’ expressed intent to bind themselves in preliminary agreements by creating a duty to bargain in good faith when one of them prefers not to deal.

Although it is helpful to attach some force to preliminary agreements, the modern approach provides too little normative guidance. The current framework creates a multi-factor analysis that invokes (1) the language of the agreement; (2) the existence and number of open terms; (3) the extent of any reliance investments; and (4) the customary practice regarding formalities.\(^{44}\) The court, in addition, is to consider the context of the negotiations resulting in the preliminary agreement.\(^{45}\) A list of relevant factors confines a court’s discretion to some extent, but leaves the decision process largely obscure when, as here, courts fail to attach weights to the


\(^{44}\)See e.g., Teachers, supra note 43, at —.

\(^{45}\)This final factor recognizes that preliminary agreements always have open terms; hence, open terms per se will not be fatal to the obligation to negotiate further in good faith.
factors or 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. Finally, the new obligation to negotiate in good faith is unsatisfactory for two reasons. First, since protecting reliance, we next show, is sufficient to enhance efficiency, the obligation is unnecessary. Second, if the obligation is thought to be necessary it is unmoored because 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 Setting and the Model’s Assumptions

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 then 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 of producing various types of grinding machines and their cost. The other party – the “buyer” – invests by exploring demand for grinding machines and possible financing options if the project would be successful. A “state of nature” is constituted by the values of three economic parameters: the level of demand for various grinding machines types; the cost of producing each of these types; and the options for financing. At the start, the parties know the distribution from which the state of nature will be drawn. Time will reveal the true state. The parties then will continue their venture if the market turns out to want a particular type of grinding machine that they can produce at an appropriately low cost and finance. Otherwise, the parties will abandon this project.

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46We extend the model of Smirnov and Wait, *Hold-up and Sequential Specific Investments*, 35 Rand J. Econ. 386 (2004) to the preliminary agreement context. Their modeling strategy, in turn, is based on staged finance models used to explain venture capital investing.
To make this example formal, let two risk neutral parties, a seller and a buyer, meet at $t^0$ to consider a project. The project will fail unless both parties invest in it, but may still fail even if both invest. If the parties do not trade, the seller’s investment is wasted (her investment is fully relation-specific). The buyer’s investment may either be fully relation specific or may benefit the seller though there is no deal. For example, the seller may benefit by learning more about the nature of demand for capital inputs in mining industries, even if grinding machines will not sell.

The parties cannot contract on their project at $t^0$ because it is too complex. In particular, the project comes in $N$ types and there are $M$ possible states of nature. A project would be profitable to pursue only if the state of nature turns out to be $m^*$: Given demand and the production and financing costs that constitute the state $m^*$, the parties can profitably produce the grinding machine that they call $n^*$. In any state of nature other than $m^*$, it would be inefficient to go forward. When $N$ and $M$ are large and the parties do not know at the outset which of the possible project types, if any, they will later want to trade, it is not feasible to write an ex ante contract on the project. On the other hand, the parties can agree at $t^0$ on the nature of the project (they hope to build some type of grinding machine); what each, broadly speaking, is to do (be responsible for product design and costs, attempt to line up final users and financing); and on timing decisions (explore technical feasibility first, or explore technical feasibility and market opportunities at the same time). A project becomes “tangible” – it will support a complete contract – after the investment stage.

There are two investment “regimes.” In the first, the parties agree to invest simultaneously. In the other, 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 investment, but the timing and level of actual investments is private information. For example, if the seller’s investment is creating a set of plans, the buyer ultimately can observe whether the seller created the plans or not. The buyer

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47 Part IIA is written in narrative form, but it contains the assumptions on which the model is based.
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 made for 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, however, believes that, if a dispute were to arise, it could verify to a court a fraction of the costs of her completed investment. For the reasons just given, this fraction also is private information, and so is noncontractible.

In both investment regimes, the parties learn which of the possible project types, if any, it would be profitable to produce after time has passed and at least one of them has invested. Returning to our introductory example, the seller’s research thus 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.

We conclude this introduction to the technical aspects of the model by noting that while ex ante contracting has been shown to induce efficient investment in some asymmetric information environments, ex ante contracting cannot encourage efficient investment in our context. To be sure, 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 a 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 can award this party the larger share of the expected surplus. The preliminary agreements we study cannot affect investment behavior in this way, however. Consistent with the common view that it is difficult to contract directly on expected profits or costs, we assume that parties can observe but not verify to a court the expected surplus from the complex projects modeled below.\textsuperscript{48} When the court cannot observe a

\textsuperscript{48} An economic variable is unverifiable if the costs to the parties of establishing the value of the variable in a legal proceeding would exceed the gains. While parties commonly can estimate the expected value of conducting a transaction, the expense and time requisite to proving the profit that a foregone transaction would have yielded often will 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. For example, we assume here that the parties can
project’s surplus, it cannot enforce a contract that attempts to allocate that surplus in such fashion as to induce each party to choose the efficient investment level.

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 that contract could specify the project type the parties hoped later to trade.\(^\text{49}\) 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 would then make an offer that would award to her the full surplus that trade would generate. Anticipating this payoff, the seller would invest efficiently; that is, she would invest to increase expected surplus until the marginal gain from further investment would equal the marginal cost. Contracts that allocate bargaining power to a seller in this way cannot work, however, if the buyer could refuse the seller’s take it or leave it offer and propose a new division of the surplus. Then, the seller’s choice would be to bargain over the division – i.e., to renegotiate the ex ante contract – or to forego gains. Since parties are reluctant to leave money on the table, the seller would renegotiate and it 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. Since parties cannot commit to eschew renegotiation under current law, the proposed contract, or

\(^\text{49}\)For a review of how renegotiation and describability affect contracting behavior, see Bolton and Dewatrapont, *supra* note 12, at 560-578. The principal paper showing how the parties’ inability to describe in the ex ante contract what is to be traded reduces the value of ex ante contracting to zero is Oliver Hart and John Moore, “Foundations of Incomplete Contracts”, 66 Rev. of Econ. Stud. 115 (1999).
variants of it for cases when both parties must invest, cannot induce efficient investment.50

Regarding the possibility of specifying the project type, parties sometimes can write “specific performance contracts” that induce efficient investment even where renegotiation cannot be prevented. For example, if the parties here could know in advance that they will either trade the grinding machine n* or not trade, their ex ante contract could require the seller to deliver n* at a fixed price if the state of nature turned out to be m*. If a court would enforce this contract specifically, and if the price were appropriately chosen, the contract could induce efficient investment. Specific performance contracts, however, also would be ineffective in the context we consider, even if the parties could verify to a court that the ex post state actually was m*. As said above, in our model the parties do not know in advance just 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 nature. A court could not specifically enforce a contract that does not describe what is to be traded. 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 a transaction’s expected surplus in such a way as to induce efficient investment. In our model, then, there is no gain from ex ante contracting so such contracting will not be seen. The model thus captures the decided cases: The parties in those cases either failed to agree on anything or had only made 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 parties make a preliminary agreement at t0. Each party can invest xi ∈ {0, Xi} at t1, where i = seller or buyer. After a party completes her investment, the other party can observe αixi of the investment’s cost, where 0 < αi ≤ 1, and the investing party can later verify αixi to a

50 For further analysis, see Alan Schwartz and Robert E. Scott, Contract Theory and the Limits of Contract Law, 113 Yale L. J. 541, 611-614 (2003); Christine Jolls, Contracts as Bilateral Commitments: A New Perspective on Contract Modification, 26 J. Legal Studies 203 (1997).
court. In the model, each party’s investment $x_i$ is a discrete sum: The party must invest $x_i$. The sum $x$ is composed of various elements: raw materials, salaries, the value of human capital. The cost of some of these elements – the raw materials a party ordered – likely will later become verifiable to a court while the cost of other elements – time spent thinking – will not. The sum of the verifiable elements divided by the total investment cost $x$ equals the verifiable fraction $\alpha$.

At $t^0$, each party knows its own expected $\alpha$, but does not know her partner’s expected $\alpha$.\textsuperscript{51}

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 $\pi < 1$ (the state of nature is $m^*$) and fails with probability $(1 - \pi)$. A successful project returns a surplus of $S_{m^*} > 0$ that is net of production costs (the cost of making the grinding machine $n^*$) but gross of investment cost. The expected surplus in any state other than $m^*$ would be $S_{m^*} < 0$, so no project is pursued in these states.

The nature of the project requires one of the parties, whom we let be the buyer, move first. He invests at $t^1$. The preliminary agreement either will require the seller to invest then or to invest later.\textsuperscript{52} If both parties invest at $t^1$ and a 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 a successful project one period later, at $t^3$. The parties discount returns at $\delta < 1$ and investment is ex ante efficient: that is, the expected value of investment is $\pi \delta^2 S + (1 - \pi)0 - \delta x_s - x_b > 0$. In the sequential investment regime, where the buyer invests first, the seller would only invest if the project turns out to be a success. Figures 1 and 2

\textsuperscript{51} If $\alpha$ were verifiable, the parties could induce optimal investment by requiring the party who failed to invest appropriately to pay $1/\alpha_i$ 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 $x$. This is because, plausibly in our view, a party cannot know just what level of investment her potential partner must reach in order for the partner to perform his assigned task, and the party also would have difficulty knowing whether her partner actually invested up to the specified level.

\textsuperscript{52} If the technology requires both to invest simultaneously, the problem is not normatively interesting. The most reasonable equilibrium has both investing when investment would be efficient. The parties will pursue an efficient project and abandon an unsuccessful project. In this world, there is no role for the law to play. If the technology 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.

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describe the time lines for these regimes.

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**Figure 1**

**Simultaneous Regime**

<table>
<thead>
<tr>
<th>$t^0$</th>
<th>$t^1$</th>
<th>$t^2$</th>
<th>No deal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agree</td>
<td>Both</td>
<td>Observe state</td>
<td>Renegotiate/contract</td>
</tr>
</tbody>
</table>

**Figure 2**

**Sequential Regime**

<table>
<thead>
<tr>
<th>$t^0$</th>
<th>$t^1$</th>
<th>$t^2$</th>
<th>$t^3$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agree</td>
<td>Buyer invests</td>
<td>Observe state: Renegotiate; seller Invests</td>
<td>Realize returns</td>
</tr>
</tbody>
</table>

If a project would be profitable to pursue, the parties will write a complete contract. Recalling that the ex ante contract did not describe or price the project denoted $n^*$, the parties must bargain as if from scratch to divide the project’s expected gains. We assume Nash bargaining and normalize each party’s outside option to zero. This implies that the price in the parties’ complete contract will divide equally the surplus that trade is expected to create.

The social welfare effects of these investment regimes are ambiguous a priori. On the one
hand, the simultaneous regime is best, all things equal, because it accelerates the realization of returns (the parties capture profits earlier). On the other hand, if the project turns out to be a failure, both parties’ investments can be wasted in the simultaneous regime, while only the buyer’s investment is wasted in the sequential regime.

C. Results

We begin with the simultaneous investment regime and introduce the hold up problem that exists when parties must invest before they have a fully binding contract. The buyer’s and seller’s $t^0$ expected returns from investment in this regime are, respectively,

1) $\pi[\frac{1}{2}(\delta S)] - x_b$

2) $\pi[\frac{1}{2}(\delta S)] - x_s$

The project succeeds with probability $\pi$, and each party then expects to realize one half the project’s surplus less its investment cost. Since $x_b \neq x_s$, the sum of these returns can be positive (the project has positive expected value), though one of the private returns is negative. The project requires the participation of both, however, so in this case it will not be done. This is the ex ante hold up problem. The problem would go away if the parties could contract on investment at $t^0$: When a project would generate total expected gains in excess of costs, the party whose expected return is positive could guarantee its partner a non-negative expected return by agreeing to reimburse the partner for investment costs if the project is not pursued. Investments are noncontractible in this model, however.53

In the sequential regime (see Figure 2), the buyer invests initially and then, if the project will be a success, the parties renegotiate. Going forward from $t^2$, the net gain from the seller’s investment is just 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. Hence, in this regime, and viewed

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53Our ex ante holdup result is identical to the result described in Proposition One of Luca Anderlini and Leonardo Felli, *Transaction Costs and the Robustness of the Coase Theorem*, 116 The Economic Journal 223, 229 (2006), except that the costs there are transaction costs while the costs here are investment costs. In both models, the parties’ inability to contract in advance on costs precludes the formation of efficient agreements.
from \( t^0 \), the parties expect that renegotiation to a complete contract for a successful project will award the buyer and seller, respectively,

\[
3) \quad \pi[\frac{1}{2}(\delta^2 S - \delta x_s)] - x_b
\]

\[
4) \quad \pi[\frac{1}{2}(\delta^2 S - \delta x_s)]
\]

In the success state, the buyer expects to receive half the surplus less his investment cost; the seller expects to receive half the surplus.

To compare the relative efficiency of these regimes, denote social welfare from the simultaneous and the sequential investment regime, respectively, as \( W_{\text{sim}} \) and \( W_{\text{seq}} \). Then a social planner would prefer simultaneous investment \( (W_{\text{sim}} > W_{\text{seq}}) \) when (a) the project is likely to succeed, so the seller’s investment is unlikely to be wasted; (b) the parties’ discount rate is high (i.e., \( \delta \) is low), so that delaying returns by a period would be costly; (c) the seller’s costs probably will turn out to be low, so that not much would be saved by letting the seller await events; and (d) the possible surplus is large. Formally, writing down social welfare for each regime, simplifying and comparing, the simultaneous regime is best if

\[
S(1 - \delta) > x_s \left( \frac{1}{\delta \pi} - 1 \right). 
\]

This inequality is more likely to be satisfied when \( \pi \) is high, \( \delta \) is low, \( x_s \) is expected to be small and \( S \) is expected to be big.

The parties’ preferences will not always correspond to society’s preference, however. Thus, the buyer always prefers simultaneous investment because he does not have to reimburse the seller’s cost in the simultaneous investment regime. To be precise, the buyer prefers simultaneous investment when

\[
\pi\left(\frac{1}{2}(\delta S) - x_b\right) > \pi\left[\frac{1}{2}\delta^2 S - \delta x_s\right] - x_b. 
\]

This inequality reduces to

\[
S > \frac{-2x_s}{(1 - \delta)}, 
\]

which always is satisfied because \( \delta < 1 \).

In contrast, the seller’s preferences are parameter specific. She prefers simultaneous
investment when this would generate a greater private return; that is, when Expression (2) would exceed Expression (4):

\[(5) \quad \pi \left( \frac{1}{2} (\delta S) - x_s \right) > \pi \left[ \frac{1}{2} (\delta^2 S - \delta x_s) \right] \]

Assuming that the buyer will participate, sequential investment is efficient when the left hand side of Expression (5) is negative (the seller would reject the simultaneous regime) but the right hand side is positive. The seller could earn a positive return in the sequential regime because she is not subject to hold up there; she will invest only if the ex post bargain compensates her.\(^{54}\) The availability of the sequential regime thus permits some projects to be done that would otherwise be foregone.

The availability of the sequential regime, however, creates an opportunity for the seller to behave strategically. To see why, suppose that simultaneous investment is efficient relative to sequential investment and the parties agree to function in the simultaneous regime. Rewriting Expression (5) and simplifying, the seller has an incentive to comply with an agreement to invest simultaneously (i.e., her private return would be greater in the simultaneous regime) when

\[(6) \quad S > x_s \frac{\pi \delta - 2}{\pi \delta (\delta - 1)} \]

The larger is the right hand side of Expression (6), the more difficult the Expression is to satisfy and so the stronger is the seller’s incentive to breach. The right hand side of Expression (6) is increasing in \(x_s\), \(\delta\) and \(\pi\).\(^{55}\) Intuitively, the seller is more likely to defect to sequential investment

\(^{54}\) The contract price to which the parties will agree in the renegotiation is \(k = x_s + \frac{1}{2}(\delta^2 S - \delta x_s)\), so the seller recovers her costs while the buyer does not.

\(^{55}\) That the right hand side of (6) is increasing in \(x_s\) and \(\delta\) may be apparent by inspection. The derivative of
if her costs would be high because defection would then save her much if the project turned out badly. She also is more likely to defect when she is more patient and thus would lose less from delaying her return. Finally, though the social planner prefers simultaneous investment when a project is likely to succeed, the seller is more likely to defect to sequential investment the more promising the project is. A seller who waits knows that the ex post bargain will reimburse her investment cost (see Expression (4)) while a seller who invests at once knows that she will bear those costs herself (see Expression (2)). When the project is likely to go forward, the seller thus is more likely to wait. To be sure, the seller’s incentive to breach an agreement to invest simultaneously could be overcome if a successful project would generate a large enough gain (S is big). Breach, however, is always a possibility, and it is inefficient when $W_{\text{sim}} > W_{\text{seq}}$.

In addition, the seller’s incentive to breach may cause some efficient projects to be foregone. The buyer’s expected return from sequential investment sometimes would be negative when his return from simultaneous investment would be positive. In many of these cases, the buyer would only participate if the seller agreed to simultaneous investment. Even if the seller did agree, however, a sophisticated buyer would still not participate if his costs would be high and the seller’s defection is a serious possibility. The seller would like to commit to simultaneous investment in this circumstance because her expected gain is (assumed to be) positive, but she cannot. As we have just shown, 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 date certain and then to invest the anticipated amount ($x_s$) would not be credible. In game theory terms, an equilibrium in which the seller invests simultaneously whenever simultaneous investment would be efficient is not subgame perfect. As a consequence, efficient projects will

\[
(6) \text{ with respect to } \pi \text{ is } x_s \left\{ \frac{\delta [\pi \delta (\delta - 1) - (\delta - 1)]}{\pi^2 \delta^2 (\delta - 1)^2} \right\} \text{ which is positive because } \pi \text{ and } \delta \text{ are less than one.}
\]

The buyer cannot predict with certainty whether the seller would defect because he does not know $x_s$. The buyer, however, does know $\pi$ and $\delta$. When both are relatively high, the prospect of seller breach realistically could be sufficiently great as to deter the buyer from participating.

56
sometimes be forgone.\footnote{The model here has at most two investment stages: both parties invest at the same time or one invests and then the other does. The model generalizes to multistage projects in which either it is efficient 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. Anticipating this, at the next earliest stage the other party would not invest, so the project will unravel. At some stage, there is a need for commitment.}

\section*{D. Normative Implications}

If parties enter into a fully binding agreement at $t^0$, courts will protect the promisee’s expectation interest. If parties do not manifest an intention to contract at a later date, courts will award nothing. The normative question is whether the court has a constructive role to play in the situation analyzed here, where parties make a preliminary agreement, and expect later to make sunk cost investments prior to concluding a complete contract. In this Part, we show that it would be efficient for courts to protect the promisee’s reliance interest to the extent that reliance is verifiable. Protecting reliance will ameliorate the effects of strategic behavior and sometimes would deter it.

\subsection*{1. The problem of “ex post hold up”}

There are two cases of strategic behavior to consider. In the first, the project would be efficient to pursue. The seller’s private return would be greater in the sequential regime but she will promise to invest simultaneously. To understand the buyer’s incentives, denote his expected return in the simultaneous regime as $g = \frac{1}{2}(\delta S) - x_b$. The buyer’s expected return in the sequential regime is denoted $q = \frac{1}{2}(\delta^2 S - \delta x_s) - x_b$. In Part IIIC, we proved that $q < g$. In the case we consider here $q < 0 < g$. When the likelihood that the seller would defect from the simultaneous regime is sufficiently high, a sophisticated buyer thus would refuse to make the preliminary agreement. The parties then could not explore whether this ex ante efficient project will turn out well. This is the “ex post holdup” problem: Commercial parties expect to be held up in renegotiations, and so sometimes will reject efficient preliminary agreements.
To see how the law can help, recall that parties cannot contract on investment or on the fraction of investment, $\alpha_i$, that later becomes verifiable, but the sum $\alpha_b x_b$ is verifiable ex post. Denote the subjective probability that the buyer assigns to seller defection from the simultaneous regime as $\gamma$, and recall that the buyer’s expected return in the sequential regime, $q$, is assumed to be negative. 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

$$\gamma (\alpha_b x_b + q) + (1 - \gamma) g.$$ 

The first term is the buyer’s expected return if the seller did defect: the loss from being forced into the sequential regime - $q$ - offset by the reliance recovery the law awards – $\alpha_b x_b$ – both multiplied by the probability of seller defection. The second term is the buyer’s expected return if the seller complies with her agreement.

When the buyer’s expected return in the simultaneous investment regime would be negative without the reliance offset and positive with it, a buyer who expects to recover reliance would make a preliminary agreement that he otherwise would have rejected. Hence, awarding verifiable reliance to promisees when promisors exploit them would increase the number of efficient preliminary agreements. Such awards also may deter parties from breaching these agreements. If a seller expects that a nontrivial fraction of her buyer’s reliance will become verifiable, her incentive to comply would increase materially.\(^{58}\)

We make five elaborating comments about our recommendation that the law should

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\(^{58}\)Courts sometimes can use evidentiary proxies for costs that would otherwise be private information. When those proxies would be helpful, the fraction, $\alpha$, of reliance that is verifiable will increase. For discussion of evidentiary proxies, see Robert E. Scott & George G. Triantis, *Anticipating Litigation in Contract Design*, 105 Yale L. J. 814 (2006). We would treat the case where the buyer does enter, the seller wrongfully delays and the project is efficient to pursue as an ordinary case of duress. If the buyer agrees to the exploitative renegotiation price, he should be permitted, after the transaction, either to sue for verifiable reliance or to reinstate the price that would have obtained had the seller complied, if that price could be reconstructed from information that is available ex post.
protect the buyer’s reliance interest in this category of cases.59

First, the buyer’s expectation in the simultaneous regime is \(\frac{1}{2}(\delta S) - x_b\). The law cannot award this because neither \(S\) (the expected surplus) nor \(x_b\) (the full amount of the buyer’s investment) is (assumed to be) verifiable. The legal requirements that damages be reasonably certain and foreseeable commonly preclude expectation recoveries in the cases we consider.

Second, our recommendation will increase efficiency but will not achieve first best. In some cases, the verifiable portion of a party’s reliance will be too small to sustain the incentive to make a preliminary agreement. Moreover, recall that we have normalized each party’s outside option to zero for modeling convenience. When that option is positive, the base return of verifiable reliance in the deal may be too low to motivate efficient investment. First best is difficult to achieve in asymmetric information environments, however. The realistic question is whether there are possible pareto improvements.

Third, prior analyses have shown that protecting the reliance interest will induce parties to overinvest.60 Overinvestment is not a concern in the analysis here because investment is assumed to be discrete: the buyer invests \(x_b\) or he does not. Since the model assumes that investment is ex ante efficient, the subsidy we advocate also is efficient. Overinvestment, however, conceivably could be a danger if, as will sometimes happen, 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 could be induced to invest too much. We argue in an

59 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 would be quantum meruit: the buyer should recover the benefit he conferred on the seller. If this recovery would create a large enough offset to \(q\), the buyer’s loss from holdup, the buyer again would be encouraged to invest.

In such cases, the parties may contract directly on costs. Patrick Bajari and Steven Tadelis, *Incentives Versus Transaction Costs: A Theory of Procurement Contracts*, 32 Rand J. of Econ. 387 (2001), thus show that when substantial costs are verifiable, parties write cost plus contracts.

Appendix that this danger is not serious. To see the underlying intuition, recall Expression (3), which shows that, in the sequential regime, the buyer pays a large “hold up tax”; he only realizes one half of the sum that is obtained by deducting the seller’s costs from the return a successful project would produce. Awarding reliance (i.e., the verifiable fraction of the buyer’s investment) to the disappointed buyer in the sequential regime would create a “breach subsidy”. The buyer would over rely in this regime only if the net effect of the subsidy, which would increase reliance, and the tax, which reduces it, were positive. Since the tax exceeds 50%, the subsidy would have to be substantial. In the simultaneous regime, the buyer also pays a hold up tax but receives no breach subsidy; hence, the buyer underinvests in this regime with certainty. Thus, in the sequential regime the large hold up tax must be offset by a breach subsidy to induce overinvestment while in the simultaneous regime there is a tax but no subsidy. As a consequence, the buyer, when deciding how much to invest, would put much more weight on the prospect of being in the simultaneous regime unless that prospect were small. But this prospect would be large because a buyer would not ordinarily deal with a seller who is likely to breach. These considerations indicate that the remedy proposed here would not cause parties to preliminary agreements to overinvest.

Fourth, if protecting reliance enhances efficiency, there is a question why parties do not contract directly on reliance. Reliance contracts should not be seen for two reasons. First, much reliance is unverifiable. Second, there is moral hazard: 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 would deter buyers from contracting directly on investment. Indeed, there is an analogy to break up fees in mergers. Courts permit a disappointed buyer 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, however, but instead use break up fees. A break up fee ameliorates the moral hazard concern because the buyer’s payoff when a deal breaks up is independent of the amount the buyer invested in evaluating the acquisition. Courts treat break up

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61 In such cases, the parties may contract directly on costs. Patrick Bajari and Steven Tadelis, *Incentives Versus Transaction Costs: A Theory of Procurement Contracts*, 32 Rand J. of Econ. 387 (2001), thus show that when substantial costs are verifiable, parties write cost plus contracts.
fees as liquidated damage clauses, and will enforce a break up fee when it reflects a reasonable estimate of the buyer’s costs.62 Thus, the better question here is why parties do not liquidate reliance damages in the preliminary agreement. The answer is that such clauses would probably be treated as penalties.

Courts will enforce liquidated damage clauses only if the promisee has a right to the damages at issue.63 Thus, courts will permit a promisee to liquidate an estimate of her expectation because there is a prior right to recover the expectation; and courts will permit disappointed acquirers 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 and other courts will protect reliance only if the promisor failed to bargain in good faith when a deal did not materialize. Thus, there is as yet no clear rule permitting the unjustifiably disappointed party to a preliminary agreement to recover its investment costs simpliciter. Because this is the law, a clause liquidating reliance costs in the preliminary agreement would probably be struck as a penalty. A prediction of our analysis, then, is that if the right to recover investment costs becomes clearly established, parties will prefer liquidating an estimate of those costs to suing directly for them.

Fifth, the prospect of a reliance recovery before the parties make a final contract conceivably could chill negotiations, and thus prevent the pursuit of efficient deals. This should not be a serious danger if courts refuse to find a binding preliminary commitment unless all three aspects of a preliminary agreement set out above (an intention to pursue a profitable project; a division of investment tasks, and agreement on an investment sequence) exist. We make two comments with respect to the possibility that a danger is still thought to remain. Initially, the seller is the party whose participation may be chilled but it is 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, in this context, to permit the seller to commit to perform the preliminary agreement. A seller who does not want

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63See, e.g., Restatement (Second) of Contracts §356 (1979); UCC §2-718 (2003).
to commit can contract out because the rule we contend for is a default. Courts should, and do, enforce the analogue 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.”

2. Delay when the project is ex post inefficient.

The second instance of strategic behavior arises when the project turns out to be inefficient to pursue. The seller, suppose, had agreed to invest simultaneously but did not. Rather, the seller informs the buyer at \( t^2 \) that she will not invest at all. In this case, her ultimate exit is socially desirable. Nevertheless, because the deal was ex ante efficient she should have complied with her promise. 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, delay should be treated as a breach here as well. Permitting a buyer to recover reliance even in a failed deal would not discourage sellers from participating. A fraction of the seller’s reliance costs also would become verifiable. Therefore, a seller who did invest appropriately could establish her compliance with the preliminary agreement.

3. Summary

The seller breaches in this model by promising to invest simultaneously but then waiting until after the buyer has invested (and the project has become tangible) either to exit or to renegotiate to complete the project. Breach creates two inefficiencies: (a) If the buyer makes and complies with the preliminary agreement, and the project is profitable, breach causes project returns to be unduly delayed; (b) If the buyer would not invest in the sequential regime, the possibility that the seller would force the buyer into this regime by delaying would sometimes cause sophisticated buyers not to make ex ante efficient preliminary agreements. Awarding buyers reliance when sellers breach thus would increase the probability that parties would make

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\[64\] See cases cited note 28, supra.
these agreements. This conclusion can be restated in an illuminating way. The law encourages parties to invest efficiently and to trade efficiently by enforcing the contracts they make. This article adds that the law also can help by encouraging parties to make those exploratory investments that are a necessary condition to the later writing of efficient final contracts.

Turning more directly to the law, a preliminary agreement should be found (i.e., there was an intention to make a binding preliminary commitment) when the parties have agreed, albeit imprecisely, on the nature of the project, on the categories of action into which their investments were to fall (i.e., marketing or construction), and on the order in which they were to act. The absence of a price or a precise description of what each was to do should not be fatal to the finding of an agreement. There is breach of a binding preliminary commitment when the parties agreed to proceed at roughly the same time, but one of them materially delayed. If the buyer could recover verifiable reliance, then, as we have argued, parties would 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 (i.e., did the promisor actually delay investment?) and over 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 are sufficiently motivated 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 that is consistent with the model’s description of how parties act in early reliance contexts? Second, do courts award damages in the circumstances that our analysis argues is desirable? 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. There are contract data bases that permit the predictions of theoretical models to be tested much more rigorously than by inferring commercial behavior from the factual descriptions
Recent articles using these data bases to test theory include, e.g., Ronald Gilson & Alan Schwartz, Understanding MACs: Moral Hazard in Acquisitions, 21 J. Law, Econ. & Org. 330 (2005); Scott & Triantis, supra note 59.

See note __ supra.

The Key Cite Search was performed by pulling up Teachers Ins. & Annuity Assoc. v. Tribune Co., 670 F. Supp. 491 (S.D.N.Y. 1987). We clicked on the key cite feature, and selected the view to show all citing references. We selected every other case on the list producing 120 cases. We then ran a word search for an additional 30 cases. This served to provide a second independently discovered set of cases against which to compare the results of the first 120 to check for bias introduced by the search method itself. 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") /P ("GOOD FAITH" "FAIR DEALING") & BREACH (123 Docs). We selected every fourth case. Of those 30, 8 were redundant with the Key Cite search giving a total of 142 different cases.


A. The Data Base and General Results

To test the model’s predictive power, we assembled a case sample that focused more precisely on the analytical framework established by Judge Leval in Teacher’s Ins. & Annuity Assoc. v. Tribune Co. A combination of a Westlaw Key Search and a parallel word search produced a random sample of 142 cases dating from 1989 to 2005. Forty of the cases turned on issues that were not relevant to the enforcement of preliminary agreements. The remaining 102 cases directly raised a claim for recovery of early reliance investments. In thirty-eight cases, the courts 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 negotiation, so that the facts could not sustain an inference that the parties intended to be legally bound.
The remaining sixty-four cases fall into two categories. In thirty-three of the cases, the court held that the agreement either was, or could be found by a jury to be, fully binding by its terms so that a court could protect the expectation interest. In the other thirty-one, the court found that the parties either had made a preliminary agreement or alleged sufficient facts to sustain a jury verdict finding duty to bargain in good faith.

The cases indicate that parties often reach substantial agreement before they make reliance investments. Parties can protect their expectation interest if they agree on most terms but postpone the costs of drafting the contract documents and specifying the remaining terms. By signaling their intent to be fully bound, the parties will have made what the courts describe as a fully binding agreement enforceable according to its terms. Alternatively, parties may make their agreement subject to conditions precedent that excuse the promisor if stated exogenous events occur. A common example in financing agreements is the required approval of a third

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70See cases cited TAN infra. The preliminary agreement cases include those where the decision was to enforce the agreements( as binding preliminary commitments) as well as those where the court held that there were sufficient factual issues raised to get past summary judgment and go to trial on the merits.

71In every case where the parties stated expressly their intention to be bound, the court enforced the contract as a fully binding agreement.
party (such as a corporate board) as a condition precedent to performance.\textsuperscript{72} When reliance costs are observable and verifiable, parties contract specifically on them.\textsuperscript{73} Finally, in a number of cases parties sign comfort agreements that specifically state they are non-binding.\textsuperscript{74} Here, parties appear to rely on trust contracts to protect early investment.\textsuperscript{75} All these examples suggest that parties have available to them, and commonly use, contractual methods for protecting early reliance investments.

The pre-contractual reliance problem does arise in a significant number of cases, however. As we noted in Part II, in the absence of an agreement, courts will deny claims for recovery of reliance costs regardless of the theory of recovery advanced by the plaintiff.\textsuperscript{76} Moreover, even where a court finds a preliminary agreement sufficient to sustain an obligation to bargain in good faith, the defendant will still be able to exit the negotiations without liability in a number of instances.\textsuperscript{77} The courts’ reluctance to award damages in these cases may partly rest on the parties’ ability to protect early reliance themselves. The cases thus raise the question why parties sometimes fail to use available contractual 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 where the promisee argued (with at least some success) that a preliminary agreement bound the promisor to bargain in good faith, the investment

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\textsuperscript{73}See e.g., Phillips Credit Corp. V. Regent Health Group, Inc., 953 F. Supp. 482.


\textsuperscript{75} For a discussion of the self-enforcement of deliberately incomplete or indefinite agreements, see Robert E. Scott, \textit{A Theory of Self-Enforcing Indefinite Agreements}, 103 Colum. L. Rev. 1641 (2003).

\textsuperscript{76}Appendix 3, infra, shows that the plaintiffs in our sample did not recover reliance in any of these cases .

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 become 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 five cases either did not provide enough factual background 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 understand the contractual complexity problem that motivates these preliminary agreements by grouping the cases into two dominant prototypes: (1) investments in joint ventures, partnerships and distributorships, and (2) corporate financing investments, such as acquisitions and capital financing deals.78

B. Joint Ventures, Partnerships and Distributorships

An exemplar of the first investment pattern is Kandel v. Center for Urological Treatment and Research.79 In Kandel, a doctor moved his practice and his family from New York to Tennessee to join a urological practice. The parties signed an employment agreement which provided that Dr. Kandel was to work for one year; then the parties would "negotiate in good faith" to permit Kandel to purchase stock in the group.80 At year’s end, the parties did negotiate

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78 Eleven cases involve investments in joint ventures, partnerships, etc., while the remaining fourteen concern investments in financing projects.


80 The contract contained 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. (Emphasis added). Id.
but reached impasse over the financial terms of the partnership.\textsuperscript{81} Subsequently, negotiations ceased and Kandel’s employment was terminated. He filed suit against the group, alleging that the defendants breached their contract to “negotiate in good faith,” and also 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.

In this case, both parties undertook to make simultaneous investments. The partnership was to make a human capital investment in on-the-job training and access to proprietary information. The employee physician was 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, however, was not contractible ex ante. 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.\textsuperscript{82}

In \textit{Kandel}, the preliminary agreement was motivated in important party by asymmetric information: Dr. Kandel had private information as to his ability while the partnership had private information about its profitability. The parties’ investments would reveal enough information to make their project tangible, and so contractible. In other cases in the sample, the parties appear to

\textsuperscript{81}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, the formula to be used to calculate the amount of Dr. Kandel’s buy-in, and the terms of the covenant not to compete. The parties disagreed, however, on the method for calculating the stock redemption value. Id.

\textsuperscript{82}Tangible evidence of the partnership’s gain would be the accounts receivable generated by Dr. Kandel in the practice as compared to his peers, evaluations of his performance by patients, and other professionals, and the like.
function in a complex environment in which a profitable project may take many forms and the form of the particular profitable project, if any, is unknown ex ante. This pattern of preliminary agreements motivated by complexity is apparent in a number of cases in the sample. For example, inchoateness that results from complexity is reflected in (a) a joint venture to manufacture clothing that requires simultaneous investments by the seller in manufacturing capacity and by the buyer in human and financial capital;\textsuperscript{83} (b) a joint venture to establish a cell phone network requiring simultaneous investments in securing FCC approvals and in constructing a prototype;\textsuperscript{84} and (c) a distribution agreement for a new product where the distributor agrees to invest in finding sales locations and the manufacturer agrees to secure financing and approvals.\textsuperscript{85}

The outcomes in these cases are often consistent with the recommendations that our model supports. \textit{Kandel} is illustrative. Dr. Kandel (as is the buyer in the model) is taking a risk. He could be subjected to hold-up after he moves and begins to work if the practice delays 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, however, the group would be motivated to honor its commitment to invest simultaneously. Anticipating this, in turn, would encourage Dr. Kandel to invest efficiently. On the other hand, Dr. Kandel bears a further risk that, once uncertainty is resolved, his opportunity cost of performing as a partner in the practice will exceed the value of his services to the firm. In that case, trade would be inefficient ex post. Dr. Kandel, if he were sophisticated, would relocate and join 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 will be compensated

\textsuperscript{83}GFT v. Southwick Clothing L.L.C., 2004 WL 2914093 (S.D.N.Y. 2004). The human capital investments included the due diligence undertaken by the prospective buyer of the manufacturing capacity.


\textsuperscript{85}In re Matternhorn Group, Inc., 2002 WL 31528396 (Bk. S.D.N.Y. 2002).
if the group does what it should, but his prediction turned out to be wrong. Denying him damages on the facts of the case thus 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.* There, 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 applications for franchises at potentially profitable locations, Swatch undertook 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 an ex ante 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—profitable retail sites for selling Swatch watches in shopping malls—could take many possible forms and precisely what form would work could not be specified ex ante. Investment and the passage of time apparently would reveal which sites, if any, would prove profitable.

In this case, however, Swatch engaged in the bad behavior that our model predicts: It delayed processing several applications and failed to secure the necessary approvals. The court

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86 Note that in the case the court found no bad faith. The facts tend to support the inference that trade was inefficient ex post.


88 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, and in a manner consistent with the criteria discussed above.... [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
found Swatch to be in breach of a preliminary agreement to bargain in good faith and awarded Matterhorn reliance damages based on its 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* is 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 hold-up and could decline to make the efficient investment. Writing a preliminary agreement should (and did) legally commit Swatch either to invest as promised or to bargain thereafter in good faith over appropriate reimbursement for Matterhorn’s reliance costs. This case thus responds appropriately to the strategic behavior concern that we analyze.

**C. Acquisitions, Venture Capital and Secured Debt**

The existence of a preliminary agreement may be 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: (a) simultaneous investment by both parties followed by one party’s decision to exit, and (b) delayed investment by one party followed by its refusal to negotiate further.

An example of the former behavior is *Tan v. Allwaste, Inc.*. Plaintiffs were shareholders of Geotrack, which was 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. The letter bound the parties to pursue a deal in good faith and contained a

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89 Id.

90 1997 WL 337207 (N.D. Ill. 1997).
“no shop” clause by which Geotrack promised not to shop Allwaste’s stock offer to other potential buyers. 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 it offered to lower the price.

The simultaneous investment model helps to explain the use of preliminary agreements to support such acquisition projects. Here the buyer invests in information costs (due diligence) and is protected by an exclusive dealings clause: the seller won’t shop for a better deal during negotiations. Thus, the seller makes an opportunity cost investment. Investment and the passage of time together indicate whether a profitable project exists, and permit the parties to write a contract to pursue it.

In this case, the court held that the letter agreement was not a fully binding contract to acquire Geotrack, but was a preliminary agreement obligating Allwaste to negotiate further in good faith. But the court concluded, probably incorrectly, 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. Allwaste’s motion for summary judgment thus was denied. 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 subsequent jury finding of bad faith could motivate inefficient trade ex post or the refusal to enter into potentially

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91Sellers also sometimes invest in integration. See Gilson and Schwatz, supra note 63.

92In particular, plaintiffs noted the acquisition of Geotrack was to be debt free, so Geotrack's tax liability should not have affected Allwaste's analysis of the deal. Plaintiffs also provided evidence that Allwaste simply decided not to conduct any more acquisitions. Id.
profitable negotiations. On this understanding of the facts, therefore, the decision in *Tan v. Allwaste* was probably incorrect.

Contrast the commercial behavior in *Tan v. Allwaste* with *JamSports and 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 for 2003-2009. The parties had signed a letter of intent obligating AMA exclusively and in good faith to negotiate with JamSports for 90 days over 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. JamSports undertook to invest in developing a marketing plan for the Supercross series. The price to be paid by JamSports for promotion rights was dependent upon the outcome of both investments. During the agreement’s exclusivity period, Clear Channel, a competing promoter, sent letters to the AMA Board indicating that Clear Channel wanted to continue negotiations for the AMA contract. AMA failed to disclose this proposal to JamSports, and it ultimately entered into a promotional agreement with Clear Channel.

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93 Even without a jury verdict, the cost of a full-blown trial will motivate Allwaste to settle and the anticipated costs of settlement will deter efficient exit thereafter.


95 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 and for a period of [sic], 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 hereof. 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.
The court held that “AMA Pro’s insistence on material contractual terms or conditions beyond those stated in the letter of intent could constitute a material breach of its contractual duty to negotiate in good faith” but that:

“Based on our reading of the decisional law on the topic, the fact that AMA Pro insisted upon a significant condition that was not included in the letter of intent is 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 commonsense construction” of good faith is the absence of bad faith or bad intent.”

Id. at 848, citing A/S Apothekernes Laboratorium for Specialpraeparter v. I.M.C. Chemical Group, Inc., 873 F.2d 155, 158 (7th Cir. 1989). “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 when such insistence is a thinly disguised pretext for scotching the deal because of an unfavorable change in market conditions.” Id.

JamSports alleged that AMA breached the preliminary agreement by entertaining a competing proposal while negotiations were ongoing with it. 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 also a breach of the duty of good faith if put forth with “bad intent”.

JamSports illustrates the uncertain grasp courts exhibit concerning just what behavior constitutes a bad faith failure to negotiate. On the one hand, AMA behaved strategically in the way our model predicts: It delayed its opportunity cost investment by entertaining 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 found that this behavior constituted a breach of the duty to negotiate in good faith, so that JamSports would be permitted to prove its reliance losses at trial.

But the court’s further finding that it was a per se violation of the duty of good faith for AMA, with “bad intent”, to insist on new conditions during the negotiations is questionable.

96 The court held that “AMA Pro’s insistence on material contractual terms or conditions beyond those stated in the letter of intent could constitute a material breach of its contractual duty to negotiate in good faith” but that:

“Based on our reading of the decisional law on the topic, the fact that AMA Pro insisted upon a significant condition that was not included in the letter of intent is 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 commonsense construction” of good faith is the absence of bad faith or bad intent.”

Id. at 848, citing A/S Apothekernes Laboratorium for Specialpraeparter v. I.M.C. Chemical Group, Inc., 873 F.2d 155, 158 (7th Cir. 1989). “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 when such insistence is a thinly disguised pretext for scotching the deal because of an unfavorable change in market conditions.” Id.

Parties make preliminary agreements in considerable part because they do not know at the start just which project type from the set of potential project types will turn out to be profitable. If there is a profitable project, the parties will then propose a number of conditions to each other 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 finding that introducing a new condition with “bad intent” is per se bad faith thus reflects 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 that is a separate issue.

To summarize, 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 can motivate a party who fears being held up to invest in an ex ante efficient project although the other party may have an incentive to delay his own investment. The cases are consistent in finding a breach of a preliminary agreement, thereby triggering a duty to bargain in good faith, 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 the model, courts find preliminary agreements when the parties have agreed upon the nature of their project, on the nature of the investment actions that each is committed to undertake and on

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the order in which these actions are to be pursued.99 This baseline for finding 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.100

The problem revealed by the cases, however, is that no matter how sharp are the intuitions of experienced judges, 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 may be unhelpful since courts will sometimes misapply it. Thus, we see evidence in Tan v. Allwaste of a court permitting a jury to find bad faith where there is no evidence of investment delay and where apparently the deal would have been inefficient to pursue. And, on the other hand, in JamSports v. AMA a party who does breach the obligation to bargain in good faith by delaying investment is 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 question to them. But absent a theory even the wisest judge can make mistakes.

V. Conclusion

Parties often make relation specific investments on the basis of preliminary understandings, with the intention later of formalizing their relationship. These investments are lost when the contemplated deal turns out to be unprofitable. In some no-deal cases, a promisee


100 See TAN infra.
who has sunk costs comes to believe that the promisor had treated him unfairly. The promisee had been induced to invest by 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. We first show, in contrast to the regnant scholarly view, that courts will not award damages for reliance unless the parties had reached agreement on sufficient material terms to support an inference that the parties wanted legal weight to attach to their preliminary understanding. Getting this rule straight, however, is only a necessary condition for providing parties and courts with sufficient 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, since litigated deals commonly are ex post inefficient, and thus would be in neither party’s interest to pursue, it is difficult to see 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 both of them recognize should not be done. 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 are the areas in which each has primary responsibility and the rough order in which their contributions are best made. Commencing to invest in such a potential project may produce two types of gains: (a) Investment accelerates the realization of returns if the project turns out to be profitable; (b) Investment illuminates which, if any, of the possible forms that a project could take would be profitable, and so 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 here, little is written down, the behavior of a contract partner is difficult to observe, and the world is uncertain. Strategic behavior in the world we analyze 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, so the parties renegotiate to set a price, the faithful party’s sunk costs will be ignored in the new bargain while the unfaithful party will be compensated for costs it 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 foregone.

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 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 possibility 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 materially. First, it shows what must be settled for there to be an actionable preliminary agreement: the parties must agree on the type of project (a shopping center, 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 are both necessary and sufficient conditions. Second, a breach is a deviation from the agreed investment

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101 The rule for which we contend is a default. Parties who are concerned that a court, even using the criteria for a preliminary agreement developed above, could award reliance too frequently can contract out by stating that no liability will attach to any statements or representations unless they are included in a formal written contract.
sequence: in particular, breach is delay. Third, the law has two related goals: to deter strategic behavior and to encourage investment. These goals are advanced by awarding the faithful party its verifiable reliance costs if the other has wrongfully delayed investment. There is no need to protect the promisee’s expectation, which would be hard to do in any event for projects that never get off the ground.

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 reason we have uncovered. Reported cases are a weak foundation for empirical conclusions, but should be taken seriously when the theory is plausible and apparently 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 their promisors breached the preliminary agreement and failed to bargain in good faith over exit conditions. Our analysis indicates that while 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 breach and what the damages should be but they need not bargain about whether to pursue the project.

Our analysis also shows, however, that courts sometimes make mistakes, either by not enforcing preliminary agreements or by adopting an imprecise and overly broad definition of bad faith when they do enforce. Thus our primary contribution is normative: we offer a framework for treating early reliance cases that, we argue, would improve efficiency if courts would adopt it.

July, 2006
Appendix

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

Investment in our model is exploratory; the parties investigate whether they have a good project or not. Thus, it is natural to assume that investment affects the probability that a project will succeed rather than the returns from a successful project; later investment will affect that.
Formally, then, we assume that the success probability is increasing in the efforts of both parties and that their investments are complementary. Thus, the success probability is $\pi(x_b, x_s)$ where

$$\frac{\delta \pi(\cdot)}{\delta x_b} > 0, \quad \frac{\delta \pi(\cdot)}{\delta x_s} > 0, \quad \frac{\delta \pi(\cdot)}{\delta x_b \delta x_s} > 0.$$  

Investment is assumed to be convex in $x$ so all second derivatives are negative.

Investment is efficient if $\pi(x_b, x_s) \delta S + (1 - \pi(x_b, x_s))(0) - x_b - x_s > 0$. The buyer’s expected return in the simultaneous regime is because the buyer must share returns with the seller and returns are discounted a period. With subscripts denoting partials, first best for the buyer is $\pi_b(\cdot)(\delta S) = 1$. The buyer’s first order condition in the model is

$$\pi_b(\cdot) \frac{\delta S}{2} = 1.$$  

The buyer underinvests in the simultaneous regime because his marginal return is diminished by the seller’s discounted share. The fraction $\frac{\delta}{2}$ is the “holdup tax”.

The buyer’s expected return in the sequential regime, when the buyer could recover the verifiable portion of his investment costs, is $\pi(\cdot) \frac{1}{2} (\delta^2 S - \delta x_s) - (1 - \alpha_b) x_b$.  

52
The first order condition for the buyer in the sequential regime is 

\[ \pi_b(\cdot) \frac{\delta^2}{2} \left( S - \frac{x}{\delta} \right) = (1 - \alpha_b) \]. The buyer recovers \( \alpha_b \) of his costs, so the last term is the portion he bears. The hold up 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 under rely to some extent.

We create an example to see whether the breach subsidy will cause the buyer to overinvest. In the example, the buyer discounts risky activities – here finding a good project – by 10% and the seller’s costs reduce the expected return \( S \) by 20%. Then in the sequential regime the hold up tax is approximately two thirds.\(^{102}\) The buyer would invest efficiently if the breach subsidy were two thirds:

\[ \pi_b(\cdot) \frac{S}{3} = \frac{1}{3} \text{ so } \pi_b(\cdot)S = 1. \] In this variant, two thirds of the buyer’s costs would be verifiable so that \((1 - \alpha_b)\), the share of costs the buyer must bear, is one third. The breach subsidy would exactly offset the hold up tax. The buyer therefore would not over rely in the sequential regime on the assumed parameters unless \( \alpha_b \) exceeded 67%. For example, if \( \alpha_b \) were \( \frac{3}{4} \), then \( \pi_b(\cdot) \frac{S}{3} = \frac{1}{4} \) so that \( \pi_b(\cdot)S = \frac{3}{4} \) and the buyer would over rely. To see by how much, the

\(^{102}\)On these parameter values, the buyer at the margin receives \( .332(S) \) in that regime. In the simultaneous regime, the buyer receives \( \delta/2 \) of the marginal dollar so when \( \delta \) is \( .9 \) \((r = 10\%) \) the hold up tax is \( .55 \).
marginal dollar of revenue is reduced by the hold up tax but the marginal dollar of cost is reduced by the breach subsidy. When the revenue tax is \( \frac{3}{4} \) and the breach subsidy is \( \frac{1}{4} \), the buyer would over rely by the difference, or 8%.

The issue, however, is not whether the buyer would invest too much in the sequential regime. Rather, the issue is whether the buyer would overinvest after making a preliminary agreement to invest simultaneously and when his costs would be subsidized only if the seller breaches. In the simultaneous regime, the buyer pays a hold up tax (his marginal return is reduced by \( 1 - \delta/2 \)), 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 hold up tax when the seller will comply and the expected value of the tax/subsidy combination when the seller will breach. In this example, the net is \( \frac{1}{4}(0.08) + \frac{3}{4}(-0.55) = -0.39 \). The first term is the probability that the buyer would be in the sequential regime (\( \frac{1}{4} \)) times the net incentive to over rely in that regime (8%); the second term is the probability that the buyer will be in the simultaneous regime (\( \frac{3}{4} \)) because the seller will comply times the incentive to underinvest there in consequence of the hold up tax (-55%). The buyer will under rely because the net expected effect on his incentives is negative.

In this example, when 75% of the buyer’s costs would be verifiable and the seller is expected to breach with a fairly high probability, the hold up tax would still cause the buyer to underinvest by a substantial amount. As to the intuition, in the sequential regime, the breach subsidy is offset by a large hold up tax while in the simultaneous regime there is no subsidy and the hold up tax also is 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 – realistically is much below 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 (when the seller breaches). The net effect causes the buyer to
underinvest. The breach subsidy we recommend thus could 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 percent of the time.