I. INTRODUCTION

Paradoxically, contracts are both never complete and always complete. Contracts are never fully complete, because some contractual incompleteness is inevitable, given the costs of thinking about, bargaining over, and drafting for future contingencies. In addition, contracting parties may sometimes leave contracts incomplete on pur-
pose, either because one or both of the parties withhold information necessary to complete the contract, or because the parties have determined to “agree to agree later.”

At the same time, contracts are always obligationally complete, because in order for a court to enforce the contract, it must conclude that the material terms are sufficiently complete that the intent of the parties can be determined. In such a case, the court will opt to gap-fill any incomplete terms. In this sense, contracts are always complete, since either the court will fill any incomplete terms for the parties or the contract is not enforceable.3

When parties enter into a complete contract, they specify—optimally—their rights and obligations in every future state of the world. Because the original contract lays out the optimal set of obligations and rights in every future contingency, the parties never need to alter obligations in light of new information or the resolution of uncertainty. In other words, they never renegotiate or breach the contract. As noted, however, parties fail to reach such contractual completeness for a variety of reasons, meaning that contracting parties frequently renegotiate, breach, and litigate as new information becomes available and unforeseen events unfold.

Economists and legal scholars long have recognized that this inevitable contractual incompleteness creates two types of investment problems: underinvestment and overinvestment. Both of these investment problems are measured against the efficient investment level—that is, the investment level that maximizes the gains from the contractual arrangement.

Incomplete contracts present a danger of underinvestment because, to the extent that the parties’ obligations are not optimally specified in the contract, an opportunity arises to renegotiate those obligations in the future. This renegotiation raises the prospect of opportunistic behavior—during renegotiation, one or both parties may attempt to garner a higher fraction of the gains from continuing to trade. If the parties can easily switch to alternative bargaining partners, then both can walk away from the existing relationship and these attempts at holdup will fail. However, the greater the relationship-specific investment that a party has made in contemplation of performing on the agreement—for example, nonrecoupable expenditures, information sharing, specialization, training, etc.—the more vulnerable she will be to holdup attempts by her partner. Recognizing this, parties will be reluctant to engage in relationship-specific

investment in the face of contractual incompleteness, unless some resolution to the holdup problem can be found.

On the other hand, coupled with a damage remedy, contractual incompleteness also can lead to overinvestment. In some future contingencies, the parties are better off not trading, even though the contract requires them to do so. In this state, the damage remedy guarantees the investing, nonbreaching party a certain return, even though the investment has no social value (the parties will not be trading and the investment only has value if the relationship continues). Anticipating this guaranteed return, the contracting party may invest too heavily in the relationship.

Economists have analyzed at length the mechanisms for avoiding the potential inefficient investment problems that accompany contractual incompleteness. The mechanisms typically suggested are complex contractual arrangements4 or asset ownership—that is, the firm.5 The complex contractual arrangements are rarely observed in practice,6 and it is well recognized that asset ownership is not always a practical response to contracting problems.7

Given the dangers of inefficient investment created by contractual incompleteness and the limited practicability of the drafting and ownership solutions, what can the parties do or, more specifically, what can contract law do to approximate the incentives and investment levels that would be reached in the presence of a perfectly complete contract? In this Article, we argue that, although contract law may be unable to replicate the optimal contract envisioned by eco-

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nomic models, it can reduce the problems of inefficient investment associated with incomplete contracts.

As noted, because an incomplete contract is unenforceable unless a court chooses to fill gaps and resolve ambiguities in the contract, a contract—if it legally exists at all—is never really obligationally incomplete. This alone, however, does not resolve the potential for inefficient investment associated with incomplete contractual arrangements. Unless courts choose to fill gaps and resolve ambiguities in a manner that minimizes the incentives to over- or underinvest, contracts that are completed by courts will not mitigate problems of inefficient investment and may even exacerbate them.

We propose a default rule of contractual gap-filling and interpretation (an “RSI default”) that applies to incomplete contracts only when one of the contracting parties has made a relationship-specific investment (an “RSI”). Subject to a notice requirement, the RSI default fills gaps and resolves ambiguities in the contract in favor of the party making the RSI. As a result, it allocates bargaining power during renegotiation of the contract to the investing party. By allocating renegotiation power to the contracting party most likely to fall victim to holdup (that is, the relationship-specific investor), the RSI default encourages contracting parties to make such investments.

In addition, because the RSI default must not encourage inefficient overinvestment, we propose that, in order to gain the benefit of the RSI default, the relationship-specific investor must provide notice of such investment to the noninvesting party. The notice requirement reduces the incentive to overinvest or behave strategically (when a party invests in the relationship simply to trigger the RSI default). If the proposed investment is inefficient—the investment is unlikely to create a surplus that the parties can divide through side payments—the noninvesting party can object. Furthermore, the notice requirement encourages contracting parties aware of a contractual gap or ambiguity to share that information with their contracting partners. As such, the RSI default encourages contracting parties

8. We address the informational burden on courts making this inquiry infra Part V. The court does not have to observe or verify perfectly investment levels for the RSI default to increase contractual surplus. All that is needed is for the court to observe a signal correlated with the investment.

9. Under the notice requirement, the parties do not contract directly on investments (which, if they could, would render the whole investment problem moot). Instead, one party proposes a broad (and perhaps nonquantifiable) investment plan. The other party wants to induce the investment but cannot make a contractual commitment directly on that investment. So, instead, by not objecting to the plan, the noninvesting party triggers the RSI default. This is a credible commitment to refrain from causing a holdup because, under the default, all interpretation disputes are decided in favor of the investing party. With this commitment in hand, the investing party proceeds with the investment plan and splits the gains from trade with the noninvesting party.
to address significant contractual incompleteness at an early stage and to address the incompleteness on their own through renegotiation or contract language clarification. Even in cases where this renegotiation fails, the RSI default and notice requirement serve to reduce the level of wasted relationship-specific investment, by forcing litigation at an earlier stage than might otherwise occur.

We do not claim that the RSI default replicates what the parties could achieve through perfect contracting. Instead, we contend that contract law itself, through a careful application of good faith, interpretation, and gap-filling, can mitigate the investment obstacles inherent in incomplete contracts. And, in many cases, this will be a more cost-effective mechanism than either asset ownership or complicated contractual arrangements. In addition, the RSI default provides the added benefit of lending guidance to courts faced with allegations of opportunism and bad faith. As discussed in Part III.B of this Article, courts struggle with the issue of good faith. What is it? How is it defined? Fortunately, economists have studied the conditions under which threats are credible and opportunistic behavior is likely to occur. We employ the insights from this “theory of the firm” literature to develop the RSI default.10

Nor does the RSI default perfectly balance the incentives to over- and underinvest. We assume, however, that for most long-term contracts the holdup effect outweighs the overinvestment effect. That is to say, in most future contingencies for most long-term arrangements, the parties prefer continuing to trade. Given this assumption, the RSI default favors the investing party in any interpretive dispute, provided that notice has been given. In those cases where this assumption does not hold, the parties have two options: (1) a non-investing party concerned with overinvestment can object at the notice stage, carefully clarifying the level of investment that she will accept, or (2) write a contract with a large upfront deposit.11

10. The “theory of the firm” has been a focal point of the corporate law scholarly community. See, e.g., Frank H. Easterbrook & Daniel R. Fischel, The Economic Structure of Corporate Law (1991); William W. Bratton, Jr., The New Economic Theory of the Firm: Critical Perspectives from History, 41 Stan. L. Rev. 1471 (1989). In helping courts police and uncover contractual opportunism, this Article shows how the theory of the firm informs more than just corporate law. Another contract scholar, Gillian Hadfield, has noted the role that good faith can and should play in maintaining investments in one specific contractual context: franchisor/franchisee contracts. See Gillian K. Hadfield, Problematic Relations: Franchising and the Law of Incomplete Contracts, 42 Stan. L. Rev. 927 (1990). She finds that that the implied good faith standard encourages relationship-specific investment by the franchisee. Id. at 984-87. This Article’s argument is much broader. It shows that, whenever one contracting party has made a relationship-specific investment, an analysis of that investment and the resulting renegotiation bargaining power is critical to any interpretation, gap-filling, or good faith inquiry, no matter the contractual context.

11. See Edlin, supra note 4, at 99-101 (discussing how parties can use up-front deposits to counter overinvestment).
The economic justifications for the RSI default are the same as for other contractual default rules: reducing transaction costs and forcing information. As with any other default rule, parties can opt out of the RSI default if they anticipate that investment levels will not be an issue; in fact, the notice requirement encourages them to do so.

After discussing the reasons for contractual incompleteness, Part II of this Article places the RSI default in the context of the broader economic and legal literatures. Part II.A briefly reviews the holdup problem. Part II.B describes the dominant solution to holdups—ownership—and demonstrates that contractual default rules play a similar role in allocating ex post bargaining power. Part II.C considers the overinvestment associated with standard damage remedies and illustrates how the RSI default guards against this problem.

Part III illustrates the application of the RSI default as compared to alternative defaults through a discussion of cases and doctrines. Specifically, Part III demonstrates that the RSI default demands little from courts that they are not called upon to do already when addressing allegations of bad faith or opportunism, or when applying many majoritarian default rules. We begin in Part III.A with the “agreement to agree”—a classic case of contractual incompleteness. This Part demonstrates the superiority of the RSI default as compared to alternative defaults in addressing the issues posed by the much-discussed case of Krantz v. BT Visual Images, L.L.C.12 Part III.B demonstrates the relationship between the RSI default and a good faith inquiry using the specific case of Eastern Air Lines, Inc. v. Gulf Oil Corp.13 Part III.C discusses the interpretation of requirements and output contracts more generally, and Part III.D addresses general rules of contract interpretation.

Part IV provides some preliminary thoughts on the case of two-sided relationship-specific investment, while Part V explores the informational burdens placed on the courts by the RSI default, arguing that the informational requirements are manageable. Part VI concludes.

II. OPTIMAL RELATIONSHIP-SPECIFIC INVESTMENT AND THE HOLDUP PROBLEM

A. The Inevitability of Incomplete Contracts

In the economic model, contracts are “contingently incomplete” because, under the contractual language, the parties do not max-
mize the gains from trade in every future contingency. In the legal model, contracts are “obligationally incomplete” because, whether deliberately or by accident, contracting parties fail to fully specify at the outset of their relationship all of their rights and obligations under the contract. Because obligationally incomplete contracts are also contingently incomplete, the result of an obligationally incomplete contract is that, in some contingencies, the parties will want to reallocate their contractual commitments in light of new situations or circumstances not considered in the initial contract.

When neither party has made investments that are specific to the relationship, they will either renegotiate to reach a mutually beneficial outcome or will walk away from the relationship. However, when one or both parties have invested in assets that are relationship-specific and it is in both parties’ interest to continue to trade, the potential for holdup arises.

By definition, relationship-specific investments lose significant value if the relationship between the parties does not continue and, as a result, create an opportunity for exploitation. At the time of renegotiation, a contracting party may attempt to hold up her partner who has made a relationship-specific investment, trying to garner a higher fraction of the gains from continuing to trade. Knowing this, contracting parties will be reluctant to make relationship-specific investments, even if those investments would increase the surplus generated by the contractual relationship. Accordingly, inefficient investment may result.

B. The Ownership Solution

The dominant solution offered to the holdup problem is ownership. As discussed in this Part, ownership addresses the holdup problem by providing one party—the owner—with leverage in contract renegotiation. As a result, such ownership encourages relationship-specific investments that might not occur in the absence of this leverage. As we demonstrate in the following Part III.C, however, con-

15. Id.
16. In theory, at least, contingently incomplete contracts need not be obligationally incomplete. However, because most contracts do not have liquidated damages clauses, most contracts—including contingently incomplete contracts—are obligationally incomplete. As demonstrated by Ian Ayres and Robert Gertner, courts can use damages for breach of contract to address both types of contractual incompleteness, and excuse doctrines, such as impossibility and impracticability, perform precisely this function. Id. at 731. Because the focus is on gap-filling default rules, this Article addresses mechanisms for addressing contingently incomplete contracts only when such contracts are also obligationally incomplete. As noted, however, this will be the case in most instances.
contractual default rules create the same renegotiation leverage as ownership and, in many cases, do so more cost effectively.

Economists have analyzed at length the holdup problem caused by contingently incomplete contracts and the extent to which ownership is necessary to resolve that problem.\textsuperscript{17} For example, Oliver Hart approaches the holdup problem by noting that, because contracts are incomplete, the \textit{ex post} allocation of power—that is, the outside options available to a party if the other party does not perform—affects the outcome of any renegotiation.\textsuperscript{18} He notes that, although a contingently complete contract would perfectly eliminate the holdup problem, because contingently complete contracts do not exist, ownership of assets is an important source of power that enhances one’s relative position during renegotiation.

To see how the power of residual control rights can mitigate the holdup problem, consider the example of General Motors (GM) and Fisher Body.\textsuperscript{19} In 1919, Fisher Body signed a ten-year contract under which it agreed to supply car bodies to GM, which GM then turned into final automobiles.\textsuperscript{20} According to the traditional account, unexpected increases in the demand for GM cars during 1925-26 provided an opportunity for Fisher Body to hold up GM over the price that Fisher could charge GM on sales exceeding the number covered in the original contract and by a refusal of Fisher Body to locate its production facilities closer to GM in order to keep costs down.\textsuperscript{21} As a result, the GM-Fisher Body contractual relationship broke down during 1925-26, culminating with GM’s acquisition of Fisher Body in 1926.

Roughly speaking, there were three possible ownership structures that could have governed the GM-Fisher Body relationship: the two firms could be independent, as was the case until 1926; the two firms could integrate, with GM buying all the capital assets of Fisher Body, and...
as it did in 1926; or Fisher Body could purchase all the assets of GM. \(^{22}\) Hart demonstrates that the various potential ownership structures present different \textit{ex post} allocations of power. When GM owns Fisher, GM is the party with power during renegotiation. \(^{23}\) As a result, Fisher’s threat of holdup is substantially reduced and GM will be more inclined to invest in the relationship. In contrast, Fisher’s renegotiation power is substantially reduced. As a result, Fisher may be reluctant to make investments that pay off only if its relationship with GM continues. \(^{24}\)

In summary, although the holdup problem may lead to underinvestment, holdup problems can be mitigated if the party subject to the holdup has sufficient bargaining power during the renegotiation stage. Although ownership is one mechanism for allocating this power, it is not the only mechanism. As will be shown in Part II.C, contractual default rules may also play this role. \(^{25}\)

\section*{C. The Impossibility of Incomplete Contracts—A Theory of Default Rules}

Although contracting parties inevitably leave gaps and ambiguities in contractual language, contracts are never really obligationally incomplete. As discussed in this Part, whenever contracting parties fail to sufficiently specify their rights and obligations under the contract, contract law does it for them—either affirmatively, by imposing obligations and filling gaps, or negatively, by refusing to impose affirmative obligations and fill contractual gaps. As a consequence,

\(^{22}\) \textit{Hart, supra} note 5, at 30-33.

\(^{23}\) To be precise, Hart’s model focuses on relationship-specific investments in human capital. \textit{Id.} at 31-33. These investments are made by the management of Fisher or GM. If GM owns Fisher, GM can replace the management and run the car-body factory itself. \textit{Id.} at 31. If GM and Fisher are independent, GM does not have this option because it lacks access to the physical capital of Fisher. \textit{Id.} Ownership increases GM’s outside options because it can continue to produce car bodies (with a new management team at Fisher), even if the contract with Fisher fails. \textit{Id.} at 31-32. Without ownership, in the event the contract between GM and Fisher fails, GM has to build a new car body factory to fulfill its needs. \textit{Id.}

\(^{24}\) Since ownership by one party precludes ownership by the other party, Hart demonstrates that only the second-best amount of relationship-specific investment is possible. \textit{Id.} at 51. Further, Hart shows that integration is optimal when the physical assets are complementary, and nonintegration is optimal when the physical assets are independent. \textit{Id.} at 50-53.

\(^{25}\) This Article does not imply that ownership and court enforcement are the only mechanisms for dealing with holdup problems. The role of extralegal enforcement mechanisms, such as reputational constraints, reciprocity concerns, and repeated interactions, in reducing holdup are well noted in the literature. \textit{See, e.g., Hart, supra} note 5, at 66-68 (noting that long-term contracts are self-enforcing until unexpected changes in market conditions cause one party to turn to the courts); Scott, \textit{supra} note 12, \textit{passim} (discussing self-enforcing contracts). Indeed, scholars have shown that extralegal sanctions can sometimes allow parties to completely opt out of the legal enforcement of contracts. Lisa Bernstein, \textit{Opting Out of the Legal System: Extralegal Contractual Relations in the Diamond Industry}, 21 J. LEGAL STUD. 115 (1992).
contract law default rules allocate bargaining power during renegotiation in much the same way that ownership does.

To illustrate, consider the example of a contract for the sale of goods in which the parties specify the quantity of goods to be delivered, the date of delivery, and all other terms other than the price. If the seller's cost of performing under the contract increases, she may seek to avoid delivering under the contract. By charging the court to fill in a “reasonable price,” U.C.C. section 2-305 completes the contract for the parties.\(^{26}\) Because of the gap-filler, the buyer can demand delivery at a reasonable price and sue the seller for breach of contract if she fails to deliver.

The default rule in this case allocates some power to the buyer during the renegotiation of the price term and, in so doing, sets the starting point for new talks and discussions. Although the parties may end up agreeing to a higher price than the default price, especially if the buyer has made relationship-specific investments or the damage remedy for breach by the seller fails to make the buyer whole, the “reasonable price” default rule sets the parameters of the renegotiation, providing the buyer with some leverage.

The extent of that leverage will depend on a variety of factors, including the parties’ expectation about how the court will define the term “reasonable price.” In this manner, the set of default rules allocates bargaining power among the parties, dictating how much power each has during renegotiation. For example, a definition of “reasonable price” that accounts for the seller's increased costs provides the buyer with less leverage than a rule that defines “reasonable price” in a manner that fails to account for the seller's altered cost of performance.

Alternatively, assume that the same buyer and seller fail to specify the quantity of the good to be delivered but do specify a sale price. Again, if the seller's cost of performing under the contract increases, she may seek to avoid delivering under the contract. By setting the default for unspecified quantity terms at zero, the U.C.C. essentially directs courts to find that there is no contract. Yet, this holding also completes the contract by allocating bargaining power during renegotiation to the seller.

If the buyer still wants the seller to deliver the goods, she will have to pay the seller enough to compensate her for the increased cost of delivery. If suitable substitutes are available, the buyer may choose to purchase the goods from another seller instead, but if the buyer has made relationship-specific investments, this option, too, may be unattractive. In short, the bargaining power of the parties

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will depend on (1) the contractual default rule, (2) the parties’ relative relationship-specific investments, and (3) the ease of finding alternative contracting parties during the renegotiation stage.27

D. The Overinvestment Problem

As discussed in Part II.B, economists long have been concerned with problems of underinvestment and holdup. However, the economic and legal literature reveals a competing concern for overinvestment—the idea that the damage remedy might encourage parties to invest too much in a contractual relationship.28 As is the case with underinvestment, the overinvestment problem stems from the inability of parties to make complete contracts.

The intuition behind the overinvestment problem is that, under some circumstances, it will be efficient for one party to the contract to breach or, alternatively, renegotiate and buy her way out of the contract. This will be true for a seller, for example, if another buyer offers substantially more for a good than the good is worth to the original buyer. If the parties can renegotiate without cost, they will make the efficient breach decision no matter the legal remedy. However, the contractual remedy may distort the parties’ investment decisions and lead to too much investment.

Overinvestment occurs when it is efficient ex post for the parties to trade less than the contract specifies. If the contract is then enforced through a damage remedy, the investing party gets a return on his investment, even though the investment lacks social value. Trade with someone else is optimal; yet, the relationship-specific in-

27. Although we believe that, as a general rule, courts and commentators have insufficiently explored the role of relationship-specific investment and holdup problems when struggling with theories of contractual default rules, we do not write on an entirely clean slate. See, e.g., Ayres & Gertner, supra note 14, at 729-30 (arguing that courts could use gap-filling default rules to address economists’ concerns over contractual incompleteness and demonstrating how the choice of default rule could impact contracting parties’ strategic reluctance to enter into contingently complete contracts); Ben-Shahar, supra note 3, at 411-20 (proposing a prodefendant default rule that protects partial agreements, arguing that such a default rule better reflects the intent of the parties; permits parties to break down big commitments into smaller, more palatable commitments; and, most importantly for our purposes, promotes relationship-specific investment); Edlin & Reichelstein, supra note 4, passim (showing how the appropriate quantity choice can, under certain conditions, perfectly balance the overinvestment and underinvestment incentives); Goetz & Scott, supra note 2, at 1114 (proposing that courts interpret best efforts clauses as an obligation to invest at the joint maximization volume—i.e., at the level that would be attained in the integrated firm and specifically analogizing the role of gap-filling default rules to the role of vertical integration).

vestment has value only if the two original parties continue to trade.29 In a complete contract, the investing party would account for the fact that the investment lacks value in some future contingencies and invest less.30 Accordingly, if they are to encourage the optimal level of relationship-specific investment, contractual default rules must not only address the underinvestment and holdup problems, but they must be sensitive to problems of overinvestment as well.

The RSI default performs both of these functions better than existing default rules. As noted, the RSI default encourages relationship-specific investment by construing incomplete contractual terms in favor of the relationship-specific investor. At the same time, three aspects of the rule avoid exacerbating the overinvestment problem.

First, the notice requirement of the RSI default provides the non-investing party with bargaining power in the relationship as well. This is because the investing party gains the benefit of the default only if she has advised the noninvesting party of her plans to make such an investment and the noninvesting party does not object. This notice condition provides the noninvesting party with some leverage during renegotiation and should cause the investing party to hesitate before investing too much in the relationship. Indeed, only when the investment will create a surplus that the parties can share will the noninvesting party sign off on the investment. Otherwise, the noninvesting party has an incentive to object. When the noninvesting party fails to object, she essentially binds herself not to hold up the investing party and, instead, sells her right to hold up in return for some side payment. It is the noninvesting party’s ability to commit that creates the additional gains from trade.31

29. Edlin and Reichelstein show that, when parties set price and quantity in a contract, the parties themselves can balance the overinvestment and underinvestment problems, even if they cannot contract on the investment levels. Edlin & Reichelstein, supra note 4, at 482-91. The authors demonstrate that, when only one party makes a relationship-specific investment, the optimal quantity—the quantity selected by the parties ex ante—perfectly balances these two effects under either expectation damages or specific performance. Id. When both contracting parties make relationship-specific investments, specific performance (and the appropriately selected contract quantity) achieves the appropriate balancing, assuming certain conditions. Id. at 491-94. The Edlin and Reichelstein proposal, unlike the RSI default, cannot help parties who fail to specify a quantity term or who cannot determine which quantity term perfectly balances the two effects.

30. For an example, see A. Mitchell Polinsky, An Introduction to Law and Economics 33-37 (3d ed. 2003).

31. The notice decision and resulting investment can happen at any point in the relationship. If, for example, circumstances change three years into the contractual relationship that make an investment profitable, a party can provide notice at that point in time. Notice can even occur at the time of contract formation. Notice can be actual or constructive. Actual and constructive notice requirements are woven throughout property and contract law. See, e.g., U.C.C. § 2-206(1)(b) (2005) (requiring the seller to notify the buyer if the shipment of nonconforming goods is an accommodation rather than an acceptance); § 2-706(3) (requiring a seller to notify the buyer if it intends to engage in a private resale to mitigate the cost of the buyer’s breach); William B. Stoebuck & Dale A. Whitman, The
This notice idea is not foreign to contract law. Rather, it mimics the waiver and estoppel doctrines. In a loan contract, for example, if the lender repeatedly accepts late payment on the debt without objection, some courts will find that the lender has implicitly “waived” the payment condition. Alternatively, the court might find that the lender is “estopped” from using the late payment as grounds for acceleration of the debt. Under either doctrine, the failure to object prevents the lender from strictly enforcing the condition. Similarly, under the RSI default, if a party fails to object to an investment, it forfeits the ability to use that investment later to hold up the other party.

Second, the overinvestment problem rests on an assumption that the damage remedy fully protects the nonbreaching party’s expectancy interest: that is, the theory assumes that damages make the nonbreaching party indifferent between performance and breach. In reality, this assumption is rarely satisfied. Litigation costs, specifically attorney fees, make it expensive to pursue a contract claim. Under the American system, these costs are not recoverable. In addition, the proof requirements for damages—that is, certainty and foreseeability—reduce the nonbreaching party’s recovery. Because of these aspects of the damage remedy, the nonbreaching party is rarely fully compensated. This lack of full compensation reduces the expected return on specific investment, reducing the incentive to invest too much.

Finally, as Aaron Edlin has demonstrated, parties can control overinvestment themselves through up-front deposits. Such deposits ensure that the noninvesting party sues for breach and the investing party pays damages. These litigation positions impact the investment calculus. To see how this works, suppose that the noninvesting party makes a large deposit on the contract. Completing performance, then, is cheap for the noninvesting party; it only involves a small payment. As a result, the noninvesting party has little incentive to breach. If it occurs at all, breach will be the result of the investing party’s failure to perform. The investing party is then on the hook for compensatory damages. After paying these damages, any

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32. On the subtle differences between these two doctrines, see Jeffrey Ferrerell & Michael Navin, Understanding Contracts 434-43 (2004).
34. See, e.g., Mercedes-Benz Credit Corp. v. Morgan, 850 S.W.2d 297, 299-300 (Ark. 1993).
36. Edlin, supra note 4, at 99.
left over surplus—the residual—goes to the breaching party, the investor. Because the deposit makes the investing party the residual claimant, she refrains from excessive investment.

Edlin also shows that the parties can counter the underinvestment problem by specifying a contract for delivery of a high quality or large quantity of the good. In this case, it is never efficient to trade more than the contract specifies; so, underinvestment ceases to be a problem.

However, the RSI default is superior to the high quality/large quantity method of addressing the overinvestment problem in two important respects. First, a contract containing the optimal quality and/or quantity term proposed by Edlin may be quite costly and, in some cases, even impossible to write. It requires the parties to set a quantity and/or quality at a level where they will never want to trade more than the quantity or quality initially specified. This may be a very difficult task at the time of contract formation. The RSI default, in contrast, does not require the parties to even consider the underinvestment problem at contract formation. Instead, the court provides the commitment device after the fact. Second, Edlin’s high quality/large quantity solution to underinvestment does not work in cases where the parties do not specify a quantity or quality. In many contractual contexts—such as agreements to agree and requirement and output contracts—the parties do not agree on quantity at contract formation.

As elaborated in Part I of this Article, however, the RSI default employs Edlin’s deposit insight to allow contracting parties to limit the impact of the RSI default. If, despite the notice requirement, the parties anticipate that overinvestment is still likely to occur, they can use deposits to restrict excessive investment.

III. THE RSI DEFAULT IN PRACTICE—DOCTRINAL APPLICATIONS

Our goal in this Part is twofold: first, to illustrate the application of the RSI default through concrete examples using hypotheticals and well-known cases, and second, to demonstrate the relationship between the RSI default and existing rules and mechanisms of contract interpretation, including good faith. As will be shown, rather than increasing the burden on courts, the RSI default can aid courts in analyzing the types of cases they face everyday, such as allegations of bad faith or opportunism, by identifying those circumstances in which opportunistic threats are most credible.

We begin in Part III.A with the most “incomplete” of all arrangements: the agreement to agree. Through the example of *Krantz v. BT*

37. *Id.*
Visual Images, L.L.C., we demonstrate the superiority of the RSI default as compared to other defaults, including standard majoritarian defaults, information-forcing defaults, prodefendant defaults, and the traditional common law rule of nonenforcement. Part III.B considers how the RSI default informs good faith and Part III.C extends this analysis to the specific case of requirements and output contracts. Part III.D concludes with a discussion of general contract interpretation. The discussion in Part III thus moves from the most specific context where the RSI default applies—agreements to agree—to the most general case of contract interpretation.

A. Agreements to Agree

This Part considers, in detail, a case involving contractual incompleteness that has received much attention from courts and commentators—Krantz v. BT Visual Images, L.L.C. By examining the likely impact of the case holding on the problems of relationship-specific investment and holdup, this Part demonstrates that Krantz was correctly decided. However, as in many cases of contractual incompleteness, the court’s failure to analyze the case in a manner that accounts for relationship-specific investment and holdup problems thwarts the development of a clear doctrine to account for the results in indefiniteness cases. As a result, courts are forced to rely on vague notions of whether the contract is sufficiently definite or the incomplete terms sufficiently material, undermining predictability in the law and leading to inconsistent rulings.

In Krantz, both the plaintiff, Krantz, and the defendants, BT, were marketers of telecommunications systems and components. Beginning in 1994, the plaintiff agreed to become a distributor for the defendants, purchasing videoconferencing equipment manufactured by BT for resale to customers. Thereafter, the plaintiff established a sales account with Kaiser Permanente, recommending, selling, and installing telecommunications products to Kaiser that were manufactured by the defendants and other companies. Rather than supplying Kaiser with “off the shelf” products, however, the plaintiff learned to customize videoconferencing equipment for Kaiser, using a variety of component software and hardware supplied by the defendants and

39. Id.
40. Krantz, 107 Cal. Rptr. 2d at 211.
41. Id.
42. Id. at 212.
other manufacturers.\footnote{Id.} Eventually, the plaintiff was able to design a custom videoconferencing system specifically for Kaiser’s use.\footnote{Id.}

At the plaintiff’s suggestion, the plaintiff and the defendants agreed to submit a joint bid to supply twenty-four custom videoconferencing systems for Kaiser’s use in its Kansas City and Denver operations areas.\footnote{Id.} The parties agreed that the defendants would supply the BT components used in the Kaiser system with the plaintiff providing any remaining components and assembling and installing the system.\footnote{Id.} In order to increase its chances of winning the bid, the plaintiff agreed to reduce its distributor fees for the Kaiser bid, and the parties further agreed to share jointly in all subsequent business with Kaiser and its affiliates.\footnote{Id.} Finally, the plaintiff and the defendants agreed that, in the event their joint Kaiser bid was successful, they would negotiate product margins and price terms.\footnote{Id.}

The plaintiff thereafter shared with the defendants his ideas, configurations, and designs developed for the Kaiser bid.\footnote{Id.} However, after the defendants obtained this information, they informed the plaintiff that they would submit the bid to Kaiser on their own.\footnote{Id.} Although the trial court ruled that this “agreement to agree” was too indefinite to enforce, the appellate court disagreed and reversed, reasoning that the parties had no choice but to draft an indefinite agreement because “it remained to be seen whether the joint proposal would be accepted.”\footnote{Id. at 218.}

Analyzing Krantz, along with a sample of eighty-nine other cases, Bob Scott argues that the factor driving these case outcomes is whether the contract is incomplete due to exogenous or endogenous factors.\footnote{See Scott, supra note 12, at 1656-57.} When the contract is incomplete due to exogenous events outside of the contracting parties’ control, Scott notes that courts typically enforce the incomplete contract.\footnote{Id.} By contrast, when contractual incompleteness is endogenous to the contract—because the parties inadvertently or purposely ignored verifiable information that could have been used to complete the contract at relatively low

\footnote{Id. at 218.}
cost—courts refuse to fill in the resulting gaps and hold the contract unenforceable.54

However, the court’s ruling can be defended on other grounds that we believe hold more promise for inducing efficient investment levels.55 The plaintiff in this case, by sharing his expertise relating to Kaiser and its custom videoconference needs with the defendants, made a relationship-specific investment. That investment increased the total value of the Kaiser bid to all concerned, including Kaiser (who presumably could receive a better customized end-product due to the plaintiff’s efforts) and the defendants (whose possibility of submitting a winning bid was significantly enhanced through the plaintiff’s sharing of his expertise). When the defendants tried to hold up the plaintiff by threatening to use the information provided by the plaintiff to submit their own bid, they deprived the plaintiff of the value of his relationship-specific investment.

The elements required for application of the RSI default are all present in Krantz. First, by sharing his acquired expertise with the defendants, the plaintiff made a relationship-specific investment. In other words, plaintiff’s investment in acquiring and then sharing with the defendants his knowledge and expertise relating to Kaiser’s videoconferencing needs loses substantial value unless plaintiff’s relationship with the defendants continues. This is true even if plaintiff were to submit a bid on his own or with another partner—once shared, plaintiff no longer holds a monopoly on this information. As a result, he must compete with another bidder (the defendant) and charge competitive rates for products and services that were developed based on plaintiff’s previously unique expertise relating to Kaiser’s videoconferencing needs. The plaintiff would not have shared his expertise with the defendants if he believed that the defendants might later be free to submit a bid to Kaiser on their own, without compensating the plaintiff in any way for his shared information.

Second, the plaintiff provided the defendants with the requisite notice. In fact, the plaintiff informed the defendants at several different stages of their relationship of his efforts (and eventual success) in developing custom videoconferencing for Kaiser.56 Later, by sharing his expertise relating to Kaiser’s specific videoconferencing needs with the defendant (a move that quite obviously would pay off only if the relationship between the plaintiff and the defendants continued), the de--

54. *Id.* at 1657.
55. It is not clear to us why the information at issue in *Krantz*—margins and product prices—was unavailable to the parties simply because they did not yet know whether their bid would be successful. Admittedly, however, the facts of the case are complicated and not sufficiently discussed by the court.
56. *Krantz*, 107 Cal. Rptr. 2d at 212.
fendants were fully aware at the time they entered into the contract that the plaintiff had made a relationship-specific investment.

The Krantz court correctly found that the contract was enforceable.\textsuperscript{57} The RSI default would direct the court even further, however. Under the RSI default, in determining which product margins and price terms to supply, the court should construe those indefinite terms in a manner that favors the plaintiff. Examining the results that would occur in Krantz under the various potential default rules demonstrates the superiority of the RSI default in this instance.

For the purposes of the following illustrations, assume that the plaintiff and the defendant each advocate two different credible interpretations of the price and margin terms, supported by testimony of expert witnesses.\textsuperscript{58} The plaintiff’s interpretation would award the plaintiff $1000 under the contract, and the defendant’s would award the plaintiff $200 under the contract.

Under the traditional common law approach to indefiniteness, the court would refuse to enforce the contract, as, in fact, was the trial court’s ruling in Krantz.\textsuperscript{59} In this situation, however, the traditional common law approach is the worst possible outcome, because it forces the plaintiff to forgo all the benefits of his relationship-specific investment. Rather than encouraging relationship-specific investment, the traditional common law default rule discourages such investment and encourages holdup.

Similarly, a court applying a penalty default rule, because it believed that the parties had purposely attempted to shift the costs of completion onto the courts by leaving the product price and margin terms incomplete, would refuse to enforce the contract.\textsuperscript{60} As under the traditional common law rule, this result discourages relationship-specific investment and encourages holdup problems.

\textsuperscript{57} See id. at 218.

\textsuperscript{58} Of course, the best outcome for the defendants is a ruling that the contract is too indefinite to enforce. Such a ruling would allow the defendants to use the plaintiff’s acquired expertise, submit an independent bid, and still avoid liability to the plaintiff. However, the defendants’ next best argument presumably would be to argue for price and margin terms that favor the defendants. Because the Krantz opinion addresses only the motions regarding enforcement, we do not know what price and margin terms (other than nonenforcement) were advocated by the defendants. However, we provide hypothetical arguments here regarding the preferred price and margin terms of each party in order to explore and distinguish the application of the various default rules.

\textsuperscript{59} See Krantz, 107 Cal. Rptr. 2d at 217.

\textsuperscript{60} A court might also apply a penalty default rule if it believed one party to the contract possessed the information necessary to complete the product price and margin terms but failed to supply the information in the hopes of garnering a larger fraction of the gains from trade. However, there is no evidence of such information asymmetry in Krantz. In fact, the court explicitly found that the contract was an “agreement to agree,” implying that both parties had consented to the incomplete contractual language. Id. at 218.
Under a mimicking or traditional majoritarian default rule, the court would enforce the contract, filling in price and margin terms that the parties would have agreed to if they had been able to cost effectively do so. Because the court generally does not know what the parties would have agreed to, it is likely to apply terms of commercial reasonableness, trade usage, and the like. In this case, the court might look to similar contracts to see what other parties in similar contracts might agree to. However, there may not be sufficient information about similar parties in similar contracts, especially when one considers the plaintiff's relationship-specific investment—the sharing of his information and expertise with the defendants that permitted the successful joint bid.

Because both parties have credible claims and expert testimony, the court might simply average the two claims, awarding the plaintiff $600 under the contract. However, the court has no reliable way of discerning whether this award reflects the amount that the plaintiff would have demanded in order to be induced into ex ante relationship-specific investment. If $600 is too low an estimate, then similar contracting parties will be reluctant to make such investments in the future. Given the uncertainty on this point, the court should apply the plaintiff's preferred terms, provided that they are credible and supported by evidence.

A court applying the prodefendant default rule advocated by Omri Ben-Shahar would similarly enforce the contract but would fill in the incomplete terms differently. Under a prodefendant default rule, the court would allow the plaintiff to enforce the contract, but the best price term that he could get would be the price advocated by the defendant, in this case $200. In the present case, this outcome is even worse than the outcome under a majoritarian rule. The default rule favors the defendant, even where the plaintiff is the one who has made the relationship-specific investment. As a result, the defendant is the party with the most ex post bargaining power and the party most apt to engage in holdup behavior, as occurred in Krantz. As a result, the plaintiff is the party most likely to be forced to sue in order to recoup his relationship-specific investment. To construe the contract against him—while superior to the traditional common law approach of nonenforcement—actually reinforces the unequal ex post bargaining position of these parties, rather than improving on it.

61. Ben-Shahar criticizes the traditional common law rule that agreements to agree are unenforceable by demonstrating that such partial agreements may induce parties to ultimately reach a better, more complete contract. Ben-Shahar, supra note 3, at 390-92. He proposes instead a prodefendant default rule that protects partial agreements. Id.

62. We recognize that the prodefendant default is designed to serve other important purposes and, in the absence of a relationship-specific investment, may be an appropriate means to address partial agreements. However, in cases in which one party has made an
Finally, a court applying the RSI default would adopt the plaintiff’s price terms, here $1000. Because there is some ambiguity as to the benefit that the plaintiff actually anticipated under the contract, it is possible that this awards the plaintiff too much. However, by resolving this ambiguity in favor of the party who has made the relationship-specific investment, the court encourages such investment. At the same time, the defendants, by knowingly entering into an incomplete contract with a counterparty who has informed them that he has made a relationship-specific investment, have already contemplated and agreed to bear the risk of incomplete contractual terms.

Put another way, if the defendants wanted to avoid having the incomplete terms construed in the plaintiff’s favor, the RSI default provided them with that option. At the time that the defendants entered into the contract (already aware of the plaintiff’s relationship-specific investment), they would have known that any incomplete terms would be construed in the plaintiff’s favor. As such, the RSI default puts the burden of attempting to clarify the contract terms on the defendants, as the non-RSI party.

B. The General Good Faith Obligation

The doctrine of “good faith” in contract law is the subject of numerous scholarly articles and much judicial hand-wringing. The Restatement (Second) states, “Every contract imposes upon each party a duty of good faith and fair dealing in its performance and its enforcement.” The U.C.C. provides a bit more, defining good faith as “honesty in fact and the observance of reasonable commercial standards of fair dealing.”

Unfortunately, these standards provide little traction for a court making a good faith inquiry. Courts inevitably face the thorny issue of whether certain actions constitute a violation of good faith. In many cases, the articulation of the good faith standard turns on opportunism—a concept courts rarely define.
The RSI default helps courts formulate and apply the good faith standard by identifying those instances where opportunism, in the form of holdup, is most likely to occur. By directing courts to protect parties that have made RSIs, the RSI default provides courts with a better test than the more generalized pronouncements of the Restatement and U.C.C. Furthermore, the RSI insight in some ways lessens the burden on courts confronted with claims of opportunistic behavior. As demonstrated in Part II.A, contracting parties have an incentive to behave opportunistically when one party has some ex post bargaining leverage over the other. That leverage sometimes arises from the fact that one party to the contract has made a relationship-specific investment. In other words, not all complaints of opportunism by a contracting party are credible and deserving of court action. By identifying those cases where the incentives to hold up a contracting counterparty are present, the RSI default restricts the machinery of the good faith doctrine to cases where protection from opportunism is actually needed to promote efficient investment.

Take, as an example, the case of Eastern Air Lines, Inc. v. Gulf Oil Corp.\textsuperscript{68} In that case, a supplier of airline fuel, Gulf Oil, entered into a requirements contract with Eastern Air Lines.\textsuperscript{69} At certain airports, Gulf Oil was required to supply all of the fuel Eastern required.\textsuperscript{70} In turn, Eastern was obligated to buy fuel exclusively from Gulf Oil.\textsuperscript{71} As with all requirements contracts, the parties did not specify a fixed contractual quantity.\textsuperscript{72} After the government instituted price controls, Eastern began “fuel freighting.”\textsuperscript{73} Under this practice, Eastern jets would carry excess fuel if the price at the Gulf station was higher than the price at the plane’s prior location.\textsuperscript{74} In essence, Eastern manipulated its requirements for Gulf Oil. One issue before the court was whether fuel freighting violated the “good faith” standard im-

\textsuperscript{68} 415 F. Supp. 429 (S.D. Fla. 1975).
\textsuperscript{69}  Id. at 434-35.
\textsuperscript{70}  Id. at 435.
\textsuperscript{71}  Id.
\textsuperscript{72}  Id.
\textsuperscript{73}  Id. at 436.
\textsuperscript{74}  Id.
plicit in requirements contracts.\textsuperscript{75} Yet, like other courts attempting to determine whether contracting parties have acted in good faith, the Eastern court had no good test for determining “good faith.”

According to the Eastern court, Gulf found the requirements contract initially advantageous, because it provided “a long term outlet for a capacity of jet fuel coming on stream from a newly completed refinery.”\textsuperscript{76} However, after the price of fuel skyrocketed, Gulf sought to renegotiate the price of fuel in the contract.\textsuperscript{77} Eastern refused to renegotiate and continued to freight fuel, knowing that Gulf was in some ways locked into the relationship with Eastern and would have a tough time finding an alternative, long-term source for fuel produced by its refinery.\textsuperscript{78} In other words, Eastern had leverage in the renegotiation due to Gulf’s investment in the refinery—an investment that may or may not have been relationship specific.

It is not clear from the facts of the case whether the Gulf refinery was built specifically to fit the needs of Eastern, and the court did not attempt to discover this information. Instead, the court reasoned that fuel freighting was an established industry practice, as well as part of the Eastern/Gulf course of dealing and course of performance in other contracts. As such, the burden was on Gulf to ensure that the contract limited fuel freighting if that provision was desired by Gulf. In other words, the court found that Gulf had given implied consent to fuel freighting by not limiting it in the contract.

Note that this ruling places the burden on Gulf to clarify terms upfront. This burden can be costly given that some conditions are hard to foresee and/or unlikely to occur. To impose this burden on Gulf, as opposed to Eastern, without an analysis of whether one party has made a relationship-specific investment that makes them vulnerable to holdup by their counterparty may exacerbate the incentive for one party to engage in holdup, rather than reduce it.

A court applying the RSI default, in contrast, would consider information regarding the parties’ investments in the contractual relationship vital to the case outcome. If Gulf’s investment had been—or had become—relationship specific, then (provided that the RSI notice requirement had been met) Gulf, rather than Eastern, should get the benefit of any ambiguous or missing terms, such as those at issue in Eastern.

\textsuperscript{75} Id.
\textsuperscript{76} Id. at 432.
\textsuperscript{77} Id. at 431-32. The parties disputed the exact contours of the pricing arrangement, with Gulf claiming that the assumptions underlying the price mechanisms no longer held true. Id. at 437-38.
\textsuperscript{78} Id. at 436-37.
To illustrate, assume that facts were introduced into evidence showing that Gulf Oil had trained its workforce to work on Eastern jets or located its fueling stations at the Eastern hubs, and that Eastern had been made aware of these expenditures and had not objected. Under these facts, a court applying the RSI default would not allow Eastern to exercise holdup power, and, instead, would construe any incomplete contractual terms in favor of Gulf Oil. As a result, the court would find that Eastern acted in bad faith by fuel freighting.

The application of the RSI default thus promotes two important goals. First, knowing that RSIs are protected by courts in the event of contractual incompleteness, Gulf is more likely to incur expenses related to a relationship-specific investment with Eastern to begin with, thus increasing the total value of the contractual relationship for both parties—an economically positive result that courts should encourage. Second, knowing that courts apply RSI defaults to protect relationship-specific investments, Eastern is less likely to balk at Gulf’s attempts to renegotiate the contract in the first place. The RSI default alters the terms of the renegotiation because the anticipated interpretation of “good faith” reallocates some of the bargaining power in the renegotiation of the contract to Gulf Oil. By ignoring the *ex post* bargaining positions of the two parties and focusing instead on Gulf’s implied consent to fuel freighting, the court misses an underappreciated use of the good faith standard and contract interpretation more generally: the ability to induce relationship-specific investment.79

As the *Eastern* example shows, the RSI default improves the application of the good faith doctrine. Before invoking the doctrine, the RSI default forces a court to consider, explicitly, whether conditions for the extraction of rents exist. If not, the doctrine does not apply. By informing the good faith doctrine with the RSI default, the court construes incomplete contractual terms, implied and explicit, in favor of the party making a relationship-specific investment, thus removing the leverage from the noninvesting party in the subset of cases where opportunism is likely to occur.

C. Requirements and Output Contracts

With the *Eastern* case in mind, let us now turn to requirements and output contracts more generally. As noted, in these contracts, the parties do not specify quantity. In a requirements contract, the

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79. Note the analog between the change in bargaining power by contractual interpretation and the allocation of bargaining position by ownership. To ensure that Eastern did not hold up Gulf Oil, Gulf Oil could have purchased the assets of Eastern—integrating the two firms. Then, when the practice of fuel freighting came up, Gulf would be in a different bargaining posture. Gulf could threaten to fire and replace the management of its new subsidiary, Eastern, if it manipulated fuel requirements. In terms of bargaining power, the RSI default does the same thing, reducing the need for integration.
seller promises to provide all the goods the buyer requires. The buyer promises to buy exclusively from the seller. In an output contract, the seller promises to sell exclusively to the buyer; the buyer promises to buy all of the seller’s output. Despite the lack of a quantity term, the U.C.C. provides that these contracts are enforceable. Section 2-306(1) provides the framework:

A term which measures the quantity by the output of the seller or the requirements of the buyer means such actual output or requirements as may occur in good faith, except that no quantity unreasonably disproportionate to any stated estimate or in the absence of a stated estimate to any normal or otherwise comparable prior output or requirements may be tendered or demanded.80

Both requirements and output contracts create the chance for opportunistic behavior. In a requirements contract, the buyer might demand zero, claiming that she has no requirements under the contract. The courts have held that such a demand passes the good faith test if done for a valid business reason. Alternatively, if the contract price is less than the market price, the buyer might demand much more than the seller expected, hoping to buy the goods at the lower requirements contract price and resell them at the higher market price. Section 2-306(1) limits this chance for exploitation by the buyer: The requirement demand cannot be unreasonably disproportionate to a stated estimate or a comparable requirement demanded.

Unfortunately, neither “good faith” nor “unreasonably disproportionate” are well defined concepts in these cases. Here, again, the RSI default could provide a framework for courts in cases where one party has made an investment specific to the contractual relationship, giving courts both more specific guidance regarding how to interpret such cases in the event of a dispute and further alerting courts to the instances where one party has an incentive to behave opportunistically.

Consider a buyer and seller in a requirements contract. After the contract is signed, the seller informs the buyer that he intends to make a substantial investment in targeting its production to the buyer’s needs and the buyer does not object. Later, the buyer claims that he “requires” very little, and as a result, will buy from the seller only if the seller agrees to a lower price. The seller’s investment creates leverage for the buyer. Because the seller may now feel “locked into” the relationship with the buyer, the seller has an opportunity to hold up the buyer.

Under traditional applications of the good faith standard, the burden is on the seller to prove bad faith on the part of the buyer.

However, a court applying the RSI default would consider the parties’ investments in the relationship in reaching a decision. When, as in this hypothetical, the seller has made a relationship-specific investment, the court would shift the burden of proof to the non-investing party. In other words, the buyer must now prove a legitimate business justification for the decreased demand. Alternatively, if it had been the buyer—rather then the seller—who made an RSI, the burden would be on the seller to prove bad faith, as it is under current good faith analysis.

This burden shifting under the RSI default provides a nudge in favor of the relationship-specific investor. Hence, it alters the renegotiation position, fostering _ex ante_ decisions to invest in the contractual relationship. At the same time, overinvestment is limited. In the case of the buyer’s investment, the buyer must provide notice to the seller at the time of the investment that he is contemplating an RSI. At that time, the seller can clarify the terms of the requirements contract (establishing a floor and ceiling on the buyer’s demand, perhaps). Alternately, the seller can object, telling the buyer not to invest. If the seller does neither of these, he has accepted the risk that incomplete contract terms will be construed against him during any good faith inquiry.

**D. General Contract Interpretation**

Contract interpretation is a complex topic and the subject of much recent study by law-and-economics scholars. It involves many doctrines, including misunderstanding, the various maxims of interpretation, the parol evidence rule, and the incorporation and use of course of performance, course of dealing, and usage of trade to re-

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solve ambiguities and fill contractual gaps. In addition, courts sometimes employ various rules of thumb to resolve interpretative disputes: rules such as “construe against the drafter.”

In this Part, we demonstrate that the RSI default can provide useful guidance to courts when applying these traditional doctrines of contract interpretation. To illustrate, consider the case of Raffles v. Wichelhaus—a chestnut of the first-year contracts course. In Raffles, the buyer and seller agreed to a sale of cotton traveling aboard a ship named Peerless. There were, in fact, two ships named Peerless carrying cotton—one arriving from Bombay to England in October, the other in December. The seller shipped its cotton on the December Peerless and the buyer refused delivery, claiming that the contract called for delivery on the October Peerless.

Concluding that the parties meant materially different things, the court found that there was no contract. As discussed in Part II.C, this holding obligationally completes the contract. The court specified the rights and obligations of the parties (no delivery) under an unforeseen contingency (two boats named “Peerless”). Because of this ruling, the buyer was not obligated to take delivery, and his refusal did not constitute a breach.

Of course, it still may be efficient for the parties to trade the cotton shipped aboard the December Peerless and they may, in fact, complete that trade. But the court’s interpretation puts the seller in a weaker bargaining position during renegotiation of the contract. The seller, not the buyer, will have to give up something to induce the buyer to trade in the absence of a contractual obligation.

Alternatively, the court could have found a contract on the seller’s terms—the December Peerless. Now, in contrast, the court’s holding places the seller in a better bargaining position. So, what should the court have done in the Peerless case?

Under the RSI default, the court would have considered whether either party invested in the relationship and, if so, whether the other party had notice of that investment. If this occurred, the court should construe “Peerless” in favor of that party. This interpretative move forces the court to confront and mitigate the underlying problems stemming from contractual incompleteness.

There is no evidence that either party in Raffles made a relationship-specific investment, nor did the court look for one. At the same

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86. 159 Eng. Rep. at 375.
87. Id.
88. Id.
89. Id.
90. Id. at 376.
time, this was not a spot transaction. The buyer and seller had a relationship and might have engaged in and benefited from investment expenditures targeted to the needs of their counterparty. That said, this contract most likely was about locking in the future price of cotton, with the buyer and the seller each betting the spot price would move in their preferred direction. If this were true, the concerns informing the RSI default—reducing holdup and encouraging relationship-specific investment—are not implicated, and the RSI default would not apply. In that event, the court should apply one or more of the existing principles of general contract interpretation, which presumably are designed to further other concerns present in those types of cases.

IV. THE CASE OF BILATERAL RELATIONSHIP-SPECIFIC INVESTMENTS

Up to this point, we have discussed only those contracts in which one party makes investments specific to the relationship. In many long-term contracts, however, both parties invest. Although this type of contract is not the primary focus of this Article, we present in this Part some preliminary thoughts on how the RSI default might apply to this more complicated situation.

In a series of papers, economic theorists have specified conditions under which optimal investment by both parties can be achieved. The argument is subtle and rests on some unrealistic assumptions about the law. The insight, however, provides the building blocks for how contract doctrine might deal with long-term contracts involving two-sided investments.

To illustrate, consider a buyer and a seller, both of whom make investments specific to their ongoing relationship: a long-term contract under which seller provides electronic components for use in laptop computers manufactured by the buyer. The buyer may make modifications to the computer design that render the laptops more compatible with the seller’s components, but at the same time render the computers less compatible with other available components. Similarly, the seller might redesign or relocate its manufacturing facilities to facilitate the manufacture of these components for the buyer, but these changes are not particularly useful for the components that the seller manufactures for clients other than the buyer.

If the contract specifies the purchase price for a particular quantity of the components—that is, a price-quantity pair—then this represents the starting point for any renegotiation. The models assume that the court will specifically enforce this starting point (the first unreasonable assumption about the law). The models also as-

91. See Aghion et al., supra note 4; Chung, supra note 4.
sume that the contract specifies that one party will get the entire surplus from any renegotiation of the contract, referred to as the allocation of bargaining power in the renegotiation. Finally, they assume that parties can commit not to renegotiate the bargaining power allocation. Such a commitment is very hard to enforce.

Operating under these assumptions, the parties are able to solve the two-sided investment problem. The parties have two levers to play with (initial allocation and ex post allocation of surplus) and two parties to incentivize. Hence, it is not surprising that a contract can achieve first best. It works as follows: First, the contract assigns the entire surplus from the renegotiation to the buyer. Since the buyer is the residual claimant, he invests to make this surplus as large as possible. Second, the parties set the initial allocation or starting point of the renegotiations to motivate the seller. In general, the seller will have a tendency to invest too little, realizing that the entire surplus will go to the buyer. But if the initial allocation or starting point for renegotiation is a high enough quantity (which the seller can specifically enforce), she will invest the optimal amount.

As noted in Part II.C, however, explicit contractual terms are not the only mechanism for defining terms such as these. Instead, contractual default rules can and do define both the starting point for the renegotiation and the allocation of surplus in the absence of specific contractual provisions on these points, albeit imprecisely. Contractual default rules and, specifically, the RSI default sets the renegotiation bargaining power of the parties, by specifying the starting positions from which they begin to renegotiate. What is needed to replicate the solution offered by the economic models, then, is a way to assign the surplus from the renegotiation to one party or the other.

To do this, one needs to know the factors that affect how parties split surplus when bargaining. Economists have many models investigating this problem. The division of surplus usually hinges on the cost of disagreement and the parties’ outside options. If either of these factors differs for the two parties, the split of the surplus will differ. One way, then, to change the allocation of the surplus from contract renegotiation is for the law to change the cost of disagreement by treating the party’s claim differently (perhaps through different statute of limitations or different damage remedies).

To illustrate, suppose that the seller could not get punitive damages for breach of contract, but the buyer could. During renegotiation, the seller would be more apt to settle, hoping to get the renegotiation accomplished and avoid the threat of punitive damages.

92. Chung, supra note 4, at 1032.
Knowing this, the buyer will offer the seller a smaller share of the surplus from the renegotiation.

Although our work on the problem of two-sided relationship-specific investment is still quite preliminary, the economic models suggest a tentative doctrinal solution: Set the interpretative defaults to favor more trade but treat the remedy availability asymmetrically. Rarely, if ever, will the parties want to trade at the quantity suggested in the contract, especially when all the interpretative difficulties are resolved in favor of more trade. Instead, they will want to trade a different, lower amount. More importantly, the parties will bargain over the surplus gained by renegotiation. The asymmetric remedies ensure that the buyer receives the majority of the surplus from the renegotiation. Knowing this, the buyer will invest in making this surplus as big as possible. With the buyer’s investment taken care of, the seller’s investment remains a concern. However, the interpretative default solves this problem. By interpreting all language to favor higher trade, the seller invests as if the quantity traded will be high.

V. INFORMATIONAL BURDENS OF THE RSI DEFAULT

To employ the RSI default, a court needs to know something about the parties’ investments in the relationship. In the incomplete contracts literature, however, the common assumption is that the parties cannot contract on investments. If, to the contrary, contracting on investments is easily accomplished, then the problem of inefficient investment goes away because the contract itself would specify the level of investment. A failure to invest up to the level called for in the contract would constitute breach. Likewise, damages for investment above what the contract specified would be limited by the contractual terms.

Economists suggest that problems of verification render investments noncontractible. The typical model assumes that investments, while observable to the parties ex post, are not verifiable to the court. Stated differently, parties cannot prove breach of an investment commitment. Since parties cannot show breach, they cannot specify and then enforce promises about investments.

The RSI default seems to run counter to this verifiability assumption, because the court needs to observe the investment or a proxy for the investment in order to apply the default. As other scholars have noted, there is not a clear distinction between observability and verifiability.

94. See Hart, supra note 5, at 26-27. Indeed, in the model we do not assume that investment is observable or verifiable. Instead, we suppose that the court observes some signal, which is correlated with investment. The model is available at www.law.unc.edu/incompletecontractsmodel.
fiability. With enough money spent on information collection, any action that is observable can be made verifiable.95

If the court can observe and verify investments *ex post*, why are the parties unable to contract on the investments initially and have the court enforce those commitments? A critic might argue that, in the exact subset of contracts where the RSI default applies, the parties could solve the investment problems themselves *ex ante* at the contracting stage. As a result, the RSI default is unnecessary or even harmful.

We are unpersuaded by this argument. In practice, there are many reasons why parties fail to explicitly contract on investment levels that have nothing to do with observability or verifiability. First, the parties might fail to specify investment levels because the costs of drafting such provisions may be quite high. This is especially true for parties to deals done under a time constraint. The drafting problem is exacerbated when investment is multidimensional, requiring many different levels of investment.

Second, raising the issue of investments during contract formation might jeopardize completion of the deal.96 A willingness to make relationship-specific investments signals a level of commitment to the relationship. To avoid the danger of negative signaling, parties might instead avoid the issue of investment (and other difficult or contentious issues) during contract negotiation. Similarly, “agreeing to agree” on investment levels lets parties work out the other details of the contract, fostering some good will during the negotiation.97

Third, the use of the RSI default occurs *ex post* as an interpretative or gap-filling device. The court need not decide whether the parties breached investment promises. Instead, the court uses the investments or, more likely, proxies for investments to nudge the interpretation or gap-filling rule in favor of one of the parties. This is a much looser requirement than finding a contractual obligation about investment levels or measuring them with certainty. As such, it requires less in the way of information about actual investment levels. At summary judgment, the parties can introduce evidence of investments undertaken and the amount of notice given. As in all legal disputes, the other party can challenge these findings. The court, then, decides whether the evidence is sufficient to warrant use of the RSI default. When the contract has no RSIs or proxies for RSIs that are observable or verifiable *ex post*, the RSI default does not apply.

96. *See generally* Ben-Shahar, *supra* note 3, *passim* (discussing the reasons behind “agreements to agree”).
97. *Id.*
Finally, and perhaps most importantly, the RSI default does not preclude the parties from explicitly contracting on investment levels if they so desire. To the contrary, the notice requirement forces parties to clarify the extent of their investment obligations early or lose the benefits of the default rule, thus encouraging parties to specify their agreement as fully as possible.

V. Conclusion

The literature on relationship-specific investment spans decades. This Article links that literature to the legal scholarship on default rules to provide a unified framework for thinking about good faith, contract interpretation, and gap-filling.

Contract doctrines provide the backdrop against which all contract renegotiation occurs. As such, the doctrines can share a common underlying function: the inducement of relationship-specific investment. The RSI default pushes the doctrines in favor of the relationship-specific investor, while, at the same time, reducing that party’s incentive to overinvest. The latter goal is accomplished by requiring notice of the investment before the benefit of the default rule attaches.

The RSI insight can aid courts’ good faith analysis by moving that inquiry beyond vague notions of fair dealing and opportunism and, instead, calls upon courts to focus their attention on those conditions under which threats are credible and opportunism is most likely to occur. Under the RSI default, a court makes a finding of bad faith and sets aside a contract only if the parties prove that the economic conditions needed for opportunistic behavior actually exist.