This publication celebrates the scholarship of the University of Virginia School of Law. Each year, the Virginia Journal presents in-depth intellectual profiles of three scholars, plus a survey of recent publications by the entire faculty. Since we began in 1998, we have honored 15 scholars from our outstanding faculty: Ken Abraham, Lillian BeVier, Anne Coughlin, Barry Cushman, John Harrison, Mike Klarman, David Martin, John Monahan, Daniel Ortiz, Paul Stephan, Elizabeth Scott, George Triantis, G.E. White, Ann Woolhandler, and George Yin. Their scholarship reflects a wide variety of interests, perspectives, opinions, and methodologies, but a consistent dedication to excellence.

This year we depart from the format of earlier volumes to honor a special scholarly collaboration. In September 2002 the Law School hosted a conference on the economics of contracts to commemorate the 15th anniversary of the John M. Olin Program in Law and Economics. The Program is funded by the John M. Olin Foundation and has sponsored hundreds of public lectures, visiting professors, conferences, workshops, student fellowships, and faculty-student lunches, as well as courses in economic analysis in Virginia’s graduate program for Judges. These activities have reinforced the Law School’s reputation as one of the world’s pre-eminent centers of law and economics. The success of the law and economics movement in legal scholarship and pedagogy, here as well as in the academy as a whole, is due to a significant degree to the commitment of the Foundation.

The study of law and economics at Virginia predates the founding of the John M. Olin Program by over a decade. Last fall’s conference also celebrated what is certainly the most influential collaboration in the economics of contract law and arguably in all of law and economics. A quarter of a century ago, Charlie Goetz and Bob Scott published their first co-authored article in contract law in the Columbia Law Review, “Liquidated Damages, Penalties and the Just Compensation Principle.” That article introduced the concept that is now referred to as majoritarian default rules: that contract law provides “off-the-rack” rules that address the needs of typical contracting parties. These default rules reduce the contracting costs of most future parties, while permitting parties with idiosyncratic needs to draft alternative tailored rules. This article was followed by five more over the next eight years that profoundly transformed the analysis of contract law. Even the large number of academic and
Two additional essays appear in this issue. First, Paul Mahoney tackles the formidable task of providing a brief summary of the principal contributions of Goetz and Scott. Second, in response to an invitation by the conference organizers, Bob Scott takes the opportunity to reconsider and reformulate their classic statement of the default rule principle in light of his recent research on whether lawmakers can improve on the contracts that private parties write on their own.

John C. Jeffries, Jr.  
Dean
Charles J. Goetz and Robert E. Scott at the John M. Olin Program's Fifteenth Anniversary Conference on The Law and Economics of Contracts, University of Virginia School of Law, September 27, 2002.
Scott and Goetz: The Collaboration that Transformed Contract Law

B ob Scott arrived at the University of Virginia School of Law in 1974 from his first faculty position at William & Mary. Charlie Goetz, a professor of economics at Virginia Tech, arrived a year later as a visiting scholar, soon to become a permanent member of the faculty. This was, in itself, an extraordinary event. While the seeds of the law and economics movement had been sown at the University of Chicago, the methodology had made only modest inroads elsewhere, and it was certainly not common for a law school to hire an economist to teach law. It is a powerful statement both about the University of Virginia and Charlie Goetz that this unusual event happened at Virginia at a time when law and economics was in its infancy.

Goetz was determined to learn enough law so that he would not be an economist on a law faculty, but a law professor who happened to be an economist. Although early work in law and economics focused primarily on antitrust law, regulated industries, and tort law, Goetz found contract law fascinating. He began to discuss contract doctrine with his new colleague Bob Scott. Scott had, in turn, concluded that economic theory could illuminate some of the most vexing problems in contract law. Thus began one of the most remarkable collaborations in American legal scholarship. In just under a decade of work, Goetz and Scott transformed the field of contract law and defined a research agenda that influences contract scholars to this day.

Along with their formidable intellectual gifts, Goetz and Scott had the advantage of impeccable timing. The beginning of their collaboration in 1977 coincided with an explosion of law and economics scholarship on contract law. The period 1976-79 saw the publication of such deeply influential articles as Anthony Kronman’s analyses of specific performance and mistake, Richard Posner’s articles, some co-authored with economist William Landes, on gratuitous promises, implied contracts and restitution, and impossibility, George Priest’s analysis of remedies under the Uniform Commercial Code, and Michael Trebilcock’s thoughtful discussion of standard-form consumer contracts, just to name a few. Law and economics scholars were just beginning to look to contract law as a new source of raw material. Goetz and Scott not only led the way, but covered the field more systematically and thoroughly than any other scholar or team of scholars.

Goetz and Scott’s first co-authored article, Liquidated Damages, Penalties and the Just Compensation Principle: Some Notes on an Enforcement Model and a Theory of Efficient Breach, 77 Colum. L. Rev. 554 (1977) took up an old and still vigorous debate. Courts had long refused to enforce liquidated damages clauses that were deemed “penalties,” typically defined as damages exceeding a reasonable estimate of the actual harm resulting from a breach. This reluctance to enforce a bargained-for promise provided considerable fodder for debate. Adherents of freedom of contract argued that absent fraud or other flaws in the bargaining process, courts should enforce bargains freely made rather than presume to know the parties’ interests better than the parties themselves. The opposing view was that penal-
Goetz and Scott’s second collaborative effort, *Measuring Sellers’ Damages: The Lost-Profits Puzzle*, 31 Stan. L. Rev. 323 (1979), also took up a longstanding debate. The standard measure of a seller’s damages when the buyer repudiates is the difference between the contract price and the market value of the contracted goods. Retail sellers, however, frequently argue that this measure is inadequate. They may resell the goods to another buyer at the market price (which is the same or nearly the same as the contract price), leading to no apparent damages. However, the sellers argue, they have been deprived of the profit on one unit—absent the breach, they would have made the subsequent sale in addition to, rather than in substitution for, the sale to the breaching buyer. Although the common law treated this “lost-volume” argument skeptically, the Uniform Commercial Code authorizes recovery of lost profits where the normal damages measure is insufficient to put the seller in the same position as would performance.

Goetz and Scott pointed out that the assumption that the seller could make an additional profitable sale is likely false. In the standard competitive-market paradigm, the seller faces a horizontal marginal revenue curve and an upward-sloping marginal cost curve. The seller cannot affect the market price, but can choose to sell that number of units at which the marginal cost curve just crosses the marginal revenue curve. Any additional sales would cost the seller more than the revenue generated.

In a competitive market, then, the additional sale, while physically possible, would not be profitable. Goetz and Scott accordingly argue that market damages adequately compensate the seller. They repeat the analysis for the case where the seller has market power and accordingly faces a downward-sloping marginal revenue curve. The seller cannot affect the market price, but can choose to sell that number of units at which the marginal cost curve just crosses the marginal revenue curve. Any additional sales would cost the seller more than the revenue generated.

The article not only considerably enhanced the sophistication of the debate over liquidated damages, but employed a heuristic device that scholars draw on frequently. This was the ingenious idea that a contract might have an embedded, although non-obvious, insurance provision. Subsequent scholars would find embedded options and other financial instruments in seemingly mundane contractual provisions.
Goetz and Scott also analyzed the mirror-image case in which the buyer claims that the seller should receive lost-profit rather than market damages. These are cases in which the market value falls significantly—in fact, falls below the seller’s cost of manufacture. The buyer’s repudiation saves the seller the cost of making the good, and the buyer may claim that the seller’s damages should be capped at the seller’s expected profit, rather than the (larger) difference between the contract price and market value. A sufficient answer, as Goetz and Scott pointed out, is that the seller could have saved the cost of manufacture in any event, by simply acquiring the goods on the market at the now-reduced market price.

Goetz and Scott’s analysis set the stage for a continuation of the lost-profit debate using more sophisticated economic logic. An article by Robert Cooter and Melvin Eisenberg and another by Victor Goldberg argued that lost-profit damages for the volume seller represents compensation for the “fishing” costs needed to produce an additional sale. Bob Scott responded in a 1990 article, which noted that a retail seller could adopt a lenient cancellation policy, which would be equivalent to market damages, or a strict non-cancellation policy coupled with a deposit, which would approximate lost-profit damages. Scott argues that most sellers would (and in fact do) choose the former in order not to deter purchases by risk-averse buyers. He also makes the powerful observation that the buyer has an alternative to breach—he can take delivery and resell in competition with the seller, which would deprive the seller of the “additional” sale.

Having looked in depth at two longstanding doctrinal disputes, Goetz and Scott then turned to the more fundamental question of the purpose of contract law in *Enforcing Promises: An Examination of the Basis of Contract*, 89 Yale L.J. 1261 (1980). Any analysis of the purpose of legal enforceability of promises must begin with the observation that not all promises are enforced. Most notably, under the consideration doctrine, a gratuitous promise—even one made in earnest and for high stakes—is not generally enforceable.

Prior to Goetz and Scott’s analysis, Lon Fuller had provided the most influential justification for the consideration doctrine. Fuller argued that the process of bargaining served a purpose much like that of the seal in a prior era—it reminded the promisor that his actions had legal significance.

Goetz and Scott, like Fuller, sought an instrumental justification for the failure to enforce gratuitous promises. As in all of their work, they focused on the parties’ joint perspective at the time of contracting. Why, they asked, would anyone pay attention to a gratuitous promise (and therefore, why would anyone make one) if it is not legally enforceable? The answer is that a host of informal mechanisms, including reputation and the desire to preserve family harmony, serve to assure that most people don’t make gratuitous promises unless they intend to fulfill them. Instead, promisors tend to renege on such promises only when circumstances have changed. In Goetz and Scott’s now-famous phrase, the promisor may experience a “regret contingency” that makes him desire not to carry out his promise. Such an event may occur for either a bargained-for or a gratuitous promise. The practical line between enforceable and unenforceable promises is that when a regret contingency occurs, the promisor must nevertheless perform or pay damages with respect to the former but not the latter.

This leads to a profound insight. Legal enforcement would have no allocative impact in the typical settings in which gratuitous promises arise. To see why, first consider a bargained-for promise. A lends $100 to B. B promises to repay principal and interest. Now imagine that B insists that the promise to repay be made conditional on B’s not losing his job during the repayment period. Clearly the conditional promise is worth less to A than an unconditional promise and A will accept it, if at all, only in return for a higher interest rate. But in the gratuitous setting the promisor, by definition, does not receive compensation for the promise. Thus, the promisor can attach conditions to the promise without diminishing the price he receives for it. Legal enforcement of gratuitous promises, then, would simply lead promisors to make all such promises conditional. The ultimate transfer of money or property would still occur or not depending on the same external factors, but because those factors would be built into the promise, there would never be a breach in the legal sense. More broadly, contracting parties can adapt to the possi-
bility of regret in many different ways, and legal rules must be understood as working in conjunction with those adaptations.

The article richly deserves its place as one of the foundational works in the contract-law canon. Goetz and Scott demonstrated that careful attention to the problems economic agents solve through contracting and the way in which legal rules affect the substance of their bargains can provide insight into seemingly inscrutable contract doctrines.

In 1976, economists Michael Jensen and William Meckling introduced the term “agency costs” to economics. Agency costs arise when one party (the agent) agrees to act on behalf of another (the principal), but because the principal cannot perfectly monitor the agent, or because the agent knows better than the principal what actions are optimal, the agent has an incentive to shirk or otherwise act in a self-interested way. Goetz and Scott employed this framework to analyze another issue of immense practical and theoretical importance to contract law in a 1981 article, Principles of Relational Contracts, 67 Va. L. Rev. 1089.

The term “relational contract” had been around for some time, but scholars tended to define it as a long-term relationship in which the parties’ problems arise because of lack of foresight. Goetz and Scott significantly clarified the analysis by recognizing that their essence lies in agency problems rather than time horizons. They defined a relational contract as one in which the parties cannot reduce important terms of their understanding to well-defined obligations. This typically arises in circumstances in which one party has superior information or expertise and accordingly can, in principle, take more nearly optimal actions by exercising discretion than by having his obligations specified in detail ex ante. The danger, however, is that this party will not take optimal actions because he must share the benefits with the other contracting party but bears all of the costs of a marginal increment in effort.

Goetz and Scott used the example of a manufacturer that wishes to sell products through a distributor. Presumably the distributor has superior expertise in selling to retail customers, so it would self-defeating for the manufacturer to specify in detail how the distributor is to act. But the price of flexibility is that the distributor may pursue its own ends at the expense of the manufacturer by, for example, providing inadequate after-sale service.

Why would parties enter into contracts in such circumstances? Goetz and Scott noted that parties must often choose their poison. Not entering into a contract may deprive a party of the expertise the other can bring to bear. The parties could solve the problem through vertical integration—the manufacturer could buy the distributor’s business, or vice versa. But this will often be undesirable or infeasible. The parties must choose from a graduated set of options, from vertical integration to spot transactions, the point at which they can come closest to an optimal outcome.

With this in mind, Goetz and Scott derived an elegant normative lesson. One common term in a relational contract is an obligation to use a party’s “best efforts” to achieve some end. Often courts and commentators had discussed best efforts clauses as a contractual analog of the tort-law duty of reasonable care. But Goetz and Scott argued that courts should interpret the duty to mean that the obligor should take those actions that will maximize the joint wealth of the parties rather than the obligor’s own wealth. So understood, judicial enforcement of best efforts clauses will help parties reduce agency costs.

Goetz and Scott returned to the joint profit maximization heuristic in their next article, The Mitigation Principle: Toward a General Theory of Contractual Obligation, 69 Va. L. Rev. 967 (1983). Contract law denies a non-breaching party recovery for damages that he could have avoided by taking cost-justified measures after the breach. But this mitigation obligation is not absolute. In particular, the promisee is under no obligation to mitigate prior to a definite repudiation by the promisor. Courts also do not generally require the non-breaching party to continue to deal with the breaching party, even if it offers the lowest-cost substitute.

Goetz and Scott demonstrated that these contours of the mitigation principle fit nicely into the joint-maximization framework. Contracting parties would, in general, wish that the costs imposed by unexpected contingencies be minimized, regardless of which party bears those costs in the first instance. If the manufacturer of a custom good faces an unexpectedly high cost of
performance, he could perform at a loss or breach and pay damages, whichever causes the smaller loss. But it may also be possible that the buyer can adjust (perhaps by accepting a modified version of the product) in a way that is cheaper still. In that case, the manufacturer would prefer to pay the buyer to make appropriate adjustments.

This led Goetz and Scott to observe that a breach may be, in effect, the seller’s way of signaling to the buyer that the buyer can adjust to the changed circumstances more cheaply than the seller. In that sense, the buyer’s failure to adjust is at least as much a cause of the subsequent loss as the seller’s decision to breach. The idea is analogous to Ronald Coase’s famous, and famously provocative, claim that the tortfeasor and victim together “cause” a loss, and there is accordingly no reason to allow moral condemnation of the tortfeasor to influence the remedial rules.19

The article noted that the doctrinal outlines of the mitigation principle make considerable sense for cases in which there is a competitive market for the good or other performance that is the subject of the contract. In particular, the fact that the breach operates as a signal to the non-breaching party justifies not imposing mitigation obligations until a definite repudiation. The fact that mitigation is a means of exploiting the non-breaching party’s comparative advantage in making adjustments also explains courts’ reluctance to require the non-breaching party to accept mitigation opportunities offered by the breaching party—after all, if the breaching party can provide a substitute performance at lower cost than any third party, then there is no reason to breach in the first place. But a promisor may exploit the promisee by remaining deliberately vague about whether the promisor will breach, and thereby trigger the mitigation principle. This danger justifies the Uniform Commercial Code’s rule that a promisee may, in appropriate circumstances, demand assurance of performance and treat the promisor’s failure to provide such assurance as a breach.

The final Goetz/Scott collaboration, The Limits of Expanded Choice: An Analysis of the Interactions between Express and Implied Contract Terms, 73 Cal. L. Rev. 261 (1985), turned to yet another fundamental issue in contract doctrine—the interpretation of contractual language. In any contract, the parties’ obligations arise from a mixture of terms that they supply and terms that the state supplies. Typically a state-supplied term applies only if the parties have not expressly provided to the contrary. In the Contracts classroom, the state-supplied rules normally have no significance other than as gap fillers: they are there when the parties say nothing, but the parties can alter them with minimal effort.

What is true in the classroom, however, is not entirely true in real life. Courts seem to invest their gap-filling rules with a sort of moral primacy—they are often reluctant to abandon the default setting unless there is clear evidence that the parties wished to do so.

Goetz and Scott argued that to understand the interplay between state-supplied and customized terms, we must recognize that the former reduce not only the costs of writing the contract, but also the costs of interpreting it. Over the course of resolving many disputes, implied terms acquire a detailed meaning on which courts and contracting parties can rely. A new, customized term, by contrast, lacks an accepted meaning, which increases the probability of an interpretation contrary to the parties’ intent.

This view of the process of interpretation generated a wonderfully counterintuitive insight. A standard discussion in contract law contrasts “textualist” and “contextualist” approaches to interpreting contractual language. It is commonplace to assert that the former reduce not only the costs of writing the contract, but also the costs of interpreting it. Over the course of resolving many disputes, implied terms acquire a detailed meaning on which courts and contracting parties can rely. A new, customized term, by contrast, lacks an accepted meaning, which increases the probability of an interpretation contrary to the parties’ intent.

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Perhaps the best measure of the success of Goetz and Scott’s work is this: when I read their articles today, the main points seem obvious. But they were far from obvious in the late 1970s and early 1980s, when the articles were written. Indeed, at that time many of Goetz and Scott’s analyses seemed quite radical. But today they have become, quite literally, part of the vocabulary of contract law scholarship. It is therefore with gratitude as well as admiration that the contributors to this issue of the *Virginia Journal* celebrate the contributions of Charlie Goetz and Bob Scott.

Paul G. Mahoney
Although this concept may now be second nature to contracts scholars and teachers, this is in no small part attributable to the work of Charlie Goetz and Bob Scott, who in the 1970s and 1980s wrote a number of influential articles on the efficiency of contract law. Judges too have caught on. A Lexis or Westlaw search for case law cites to Goetz and Scott yields a result that any scholar would envy. But judges have not always fully appreciated the concepts that they have taken from the fine work of Goetz and Scott.

The recent Delaware Supreme Court opinion in Duncan v. TheraTx provides a good illustration of the mixed blessing that judicial attention to scholarship can become. To calculate damages where a promisor breached its agreement to register otherwise restricted securities, the Duncan court relied on the principles established in the Goetz and Scott article *The Mitigation Principle: Toward a General Theory of Contractual Obligation.* The court referred to this article five times in an eleven-page opinion. Unfortunately, despite these repeated references, the court seemed not quite to understand the theory it adopted as a basis for its holding.

Part I below summarizes the Duncan court's approach to damages and explains the court's reliance on *Toward a General Theory of Contractual Obligation.* Part II provides an alternative approach to damages in the case. Part III offers a conjecture on why the court went wrong and what scholars might do to prevent similar future judicial mistakes. The essay then offers a brief conclusion, one consistent with the observation that legal scholars who want to be noticed by judges should, as the adage goes, be careful what they wish for.

### I. DAMAGES PER DUNCAN

As part of a 1994 merger between TheraTx, Inc. and PersonaCare, Inc., PersonaCare shareholders received restricted, unregistered shares in TheraTx. The merger agreement provided that Delaware law governs “the construction of its terms, and the interpretation and enforcement of the rights and duties of the parties.” Under the merger agreement, TheraTx was required to file a shelf registration, to last for two years, that would permit holders to trade...
these shares in the event that TheraTx elected to undertake a public offering. On June 24, 1994, TheraTx conducted an initial public offering of its shares and, in accordance with its obligations under the agreement, TheraTx filed a shelf registration for the restricted shares that became effective on December 12, 1994.

On January 13, 1995, one month after trading began in the restricted shares, TheraTx purchased and merged with yet another company. Because this merger was a material change requiring an amendment to the shelf registration, the Securities and Exchange Commission advised TheraTx to suspend the shelf registration and to impose the trading restrictions on the shares held by the former PersonaCare stockholders. The suspension took effect on January 13, 1995 and continued until June 30, 1995.

During this period, the TheraTx share price reached a high of $23 1/8 and then fell to $13 3/8 at the time that the shelf registration was reinstated. In March 1997, another corporation purchased TheraTx in a tender offer for $17.10 per share.3

James Duncan and other former PersonaCare shareholders sued TheraTx for breach of its obligation to maintain the shelf registration for their shares. The suit began in a Georgia federal district court, which found TheraTx liable for breach. The case made its way to the Delaware Supreme Court when, on appeal, the Eleventh Circuit certified the following question:

What is the proper measure of damages when a defendant’s contractual obligation to cause a shelf registration, under which plaintiff is entitled to trade a restricted stock, to remain in effect for a specified period of time is breached by defendant’s temporary suspension of plaintiffs’ ability to trade the restricted stock?

In an opinion authored by Chief Justice Veasey, the Delaware Supreme Court begins with a summary answer to the question:

We conclude that, under Delaware law, contract damages in this situation are measured by calculating the difference between (1) the highest intermediate price of the shares during a reasonable time at the beginning of the restricted period, which functions as an estimate of the price that the stockholders would have received if they had been able to sell their shares, and (2) the average market price of the shares during a reasonable period after the restrictions were lifted.7

A summary of the court’s explanation follows:

This damages rule provides a suitable approximation of the damages that the stockholders incurred as a result of the breach, while allocating exclusively to the stockholders who elect to retain their shares after reinstatement of the shelf registration the risk of subsequent positive and negative share price changes.4

After these summaries, the court sets out to provide a full account of its reasoning. The court explicitly endeavors to “identify the damages rule that, when viewed from the time of the merger agreement provides the stockholders with adequate compensation for a breach and provides both parties with the appropriate incentive to minimize joint losses from the breach.” The court’s stated authority for the correctness of this objective is the Goetz and Scott article *Toward a General Theory of Contractual Obligation.*

The court then applies the principle to the case at hand. The proper measure of damages, states the court, “is the difference between the market price of the shares at the time that the stockholders could have sold the shares in the absence of the restrictions and some measure of the value of the shares after restrictions were lifted.” The parties apparently agreed that the hypothetical sale price but for the restriction should be calculated by reference to the highest intermediate price of the shares during a reasonable time at the beginning of the restricted period.5 The only question that remained—and the only one in dispute on certification—is the method of determining the amount by which the hypothetical ‘highest intermediate sale price’ must be reduced to reflect the remaining value of the shares after the breach.12

Three options for such reduction amount were before the court: “(1) the average price of the shares immediately after reinstatement, or the ‘hypothetical immediate sale price,’ (2) the actual sale price obtained by each stockholder, or (3) the greater of the hypothetical immediate sale price and the actual sale price.”

Recall that the price of TheraTx stock declined during the restriction period but recovered somewhat thereafter when TheraTx was purchased in a tender offer. Some of the plaintiff stockholders had retained their shares after the restriction was lifted and thus favored a calculation that failed to account for this
gain for such an uncompensated transfer, we conclude that the actual sale price rule is not an appropriate default method of calculating damages.”

Next, the court addresses and rejects the third option for a damages measure, one favored by TheraTx: a reduction for the greater of the hypothetical immediate sale price and the actual sale price. This approach, the court reasons, would impose on the plaintiff shareholders an expected loss from market fluctuation and would, the court states, pose “the opposite [problem] of that identified under the ‘actual sale price’ rule: The rule proposed by TheraTx constitutes an uncompensated transfer from the stockholders to the issuer.” Such a result, the court concludes, would be unwarranted. Again the court relies on Goetz and Scott again by quoting from *Toward a General Theory of Contractual Obligation*:

> [A]lthough the doctrine of avoidable consequences requires a mitigator to minimize the joint costs of breach, it does not require minimizing the defendant’s loss in a way that imposes a still greater loss on the mitigator himself.

In sum, then, the *Duncan* court is persuaded, largely by Goetz and Scott, that a default rule should provide the parties with ex ante incentives for joint-wealth maximization. In the case before it, the court is convinced that this means a damages award determined by the price difference between two hypothetical sales separated by roughly the length of an offending trading restriction without imposition on the plaintiff of any mitigation obligation.

**II. AN ALTERNATIVE APPROACH TO DAMAGES IN DUNCAN**

Unfortunately, with all due respect to the Delaware Supreme Court and Justice Veasey, the opinion in *Duncan v. TheraTx* can fairly be described as a misapplication of misunderstood economics principles. The court starts down the wrong path and gets more lost the farther it travels.

The *Duncan* court repeatedly stresses the importance of an ex ante perspective. (The court uses the term “ex ante” on six different occasions.) Yet the damages award it approves is based on an ex post calculation of injury (hypothetically) suffered given the
move in the market for TheraTx shares during the restriction on trading that resulted from TheraTx’s breach of contract.

To be sure, there are settings in which an ex post measure of damages can be appropriate. Under tort law, for example, although a reckless driver might be held liable for the increased likelihood of an injury, the law in fact imposes liability only for any injury that she actually causes. Either an ex ante or an ex post remedy could cause the driver to internalize the expected cost of her actions. The ex post remedy, then, need not be less efficient in this (simple) illustration. Similarly, contract law might, under some circumstances, reasonably (for convenience or otherwise) look past the time of breach to calculate damages in order to determine, for example, whether a mitigation opportunity in fact existed.

But the remedy in Duncan does not lend itself to an efficient ex post damages calculation. This is not per se because it is difficult to know whether or when a particular plaintiff would have sold her shares in the absence of the trading restriction. Instead, an ex post calculation is inefficient here given the reason one could not know whether or when a particular plaintiff would have sold her shares in the absence of the trading restriction: There is no reason to believe that falling share prices will continue to fall.

Imagine, counterfactually, that a falling share price would reliably continue to fall. If this were the case, it would be easy to understand the Duncan court’s damages calculation. As prices began to fall at the start of the restricted trading period, all rational plaintiff shareholders would have sold, but for the restriction, which could thus be blamed for the loss the shareholders suffered as they held their shares while the stock price declined further. It would be as if TheraTx held the shareholders down under a falling safe. However, because in fact stock prices can rise as well as continue to fall, this analogy is inapt. Damages calculated ex post, after a decline during a period of trading restriction, would, from an ex ante perspective, tend to overcompensate plaintiffs while those who benefited from a trading restriction—those who would have sold but were forced to hold in a rising market—would not compensate a party who imposed the restriction in breach of contract, here TheraTx.23 Put another way, unlike the tort case of a reckless driver, an ex post remedy in a contract case like Duncan would apply to an inappropriately censored sample.

As a result of the Duncan holding, issuers such as TheraTx face an inflated liability for breach of an obligation to lift trading restrictions and thus have an incentive to invest excessively in precaution or foregone opportunities that might avoid such breach (at least unless an issuer has the foresight and ability to insulate the holders of restricted shares from the trading prohibition, as discussed below). From an ex ante perspective, which the Duncan court at least ostensibly champions, this is an inefficient result.

Ironically, the Duncan court explicitly recognizes that overcompensation could result from an ex post remedy derived from stock prices on a random walk. As noted in Part I above, precisely because it makes this observation, the court rejects a damages calculation that would reflect the price received by a plaintiff in the actual, rather than hypothetical, sale of a once-restricted share. It is not clear why the court did not recognize the broader implication of this observation: that none of the options before it for an ex post remedy could plausibly provide efficient incentives.

There was a simpler, better way for the court to have proceeded. TheraTx promised the plaintiffs unrestricted shares and delivered temporarily restricted shares. The plaintiffs’ remedy should have been the difference in value between the promised unrestricted shares and the delivered temporarily restricted shares. That difference was perhaps trivial. Given that stock prices do take a random walk, the only loss from a trading restriction, here of less than six months, would be the holder’s inability to sell those shares in the event of the holder’s need for liquidity or desire for portfolio diversification during the restricted period. The best a holder who wanted to sell could do would be to sell shares short, a credit transaction and the cost, including transactions cost, of a loan can exceed that of a sale. It’s hard to imagine, however, that this liquidity cost would be significant for many securities investors. Certainly, one might reasonably speculate that this diminution in value would not approach 50% of the share value, which is the order of magnitude for damages under the Duncan holding.22 Inasmuch as the harm TheraTx caused with its breach likely was relatively small, a correspondingly small award would give future issuers an appropriately smaller incen-
When Goetz and Scott talk about mitigation and efficient incentives they are in essence talking about rotting fish, though in a more complex context, not volatile stock prices. The latter creates a mere windfall to a buyer or seller depending on whether the post-sale stock price rises or falls. Either way, in the case of the stock sale, society's store of resources neither increases nor decreases. In *Duncan*, when TheraTx breached its obligation to keep shares registered, the economic loss was the plaintiffs' limited liquidity. Holding or selling TheraTx shares once the trading restriction was lifted could no more have mitigated the injury from the TheraTx breach than holding or selling opera tickets.

This is not to say that mitigation in *Duncan* would have been impossible under any conceivable set of circumstances. As just noted, the TheraTx breach did impose some injury on the plaintiffs: a liquidity cost on holders who wished to sell restricted shares. Assuming that relevant securities law and other law as well as TheraTx's obligations to other constituents, such as bondholders, would have permitted, TheraTx, the issuer, might have solved the plaintiff shareholders' liquidity problem with an open offer to purchase the restricted shares throughout the restricted period. The price would be the then applicable market price for TheraTx shares. This would have entirely eliminated the plaintiffs' damages—the real ones from loss of liquidity and those that the court imagined from price fluctuation—as suspension of the shelf registration would not have deprived shareholders of any valuable opportunity. Given the precedent of *Duncan*, from now on firms that find themselves in the TheraTx predicament would be wise to provide such a mitigation opportunity if at all possible. That some firms may find a way around *Duncan*, however, does not make the decision, or its rationale, any more sensible.

### III. A MODEST PROPOSAL

What went wrong in *Duncan*, it seems, is that the court—or more likely the court's law clerks—managed only a surface understanding of the principles expounded in *Toward a General Theory of Contractual Obligation*. And although this essay examines just a single case, judicial misapprehension of scholarship is regrettably not an isolated phenomenon.25

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25 *Barry E. Adler*
There is perhaps an opportunity for teacher-scholars to mitigate the problem, so to speak. I have two suggestions, neither of them earth-shattering, but worthwhile nonetheless, I think.

My first recommendation is that some of us teach more theory than we do now. Although my contracts students often complain that my course includes too much economics for a first-year class, I frankly include less than I should. *Duncan* itself, for example, with its references to the efficient capital market hypothesis and other nuance, would take about an hour of class time to get across effectively. The coverage of doctrine would suffer and I have so far lacked the fortitude to face the students’ ire over the omissions. But I should be bolder. If I teach *Duncan* and one of my students clerks for or becomes the next judge to address the question presented in that case, there is at least a chance the outcome would be better.

The second suggestion is that we write, at least once in a while, a touch less theoretically. We all might do some good if we wrote the occasional piece not for one another, or even for the most sophisticated students, but for lawyers and judges who cannot afford to master the finer points of path-breaking scholarship, those who search instead for the nearest maxim.

Take this essay, for example. I hope it is of some interest to those attending the Goetz & Scott Festschrift for which it was prepared. Perhaps few of these attendees were aware of *Duncan* or its reliance on conference honorees Goetz and Scott. Also, this essay might introduce to at least some of the Festschrift attendees a formerly unfamiliar perspective on stock-price based contract damages. This said, it would be hyperbole to describe this essay as innovative. Consequently, to be crass, the essay will earn me perhaps little academic credit, and I might not have written it but for the instruction of the Festschrift organizers that I provide a short, light piece to honor Goetz and Scott. But if my analysis is correct—and imagine my chagrin at this point if it isn’t—the piece might be quite worthwhile in the hands of a broader audience, if only to provide current and future law clerks and judges a point of guidance in understanding the more sophisticated insights offered by Goetz and Scott.
FOOTNOTES

1  Note that default rules also serve a role where information asymmetry makes it certain that the parties have meaningfully agreed to any particular term. In such a case, an information-forcing interpretation, or default rule, could be optimal. Information-forcing default rules have fascinated scholars for at least two decades. Authors on this topic include Ian Ayres and Rob Germer, Bill Bishop, Lucian Bebchuk and Steve Shavell, Jason Johnston, Gwyn Quillec, and Alan Schwartz, as well as the Festschrift honorees Charles Goetz and Bob Scott. I have also entered the fray. See Barry E. Adler, The Questionable Ascent of Hadley v. Baxendale, 51 Stan. L. Rev. 1547, 1548 n. 3, 1550 n. 12 (1999) (collecting sources). Even so, information asymmetry is not the focus of this essay and I will not return to the topic here.


3  775 A.2d 1019 (Del. 2001).


5  The foregoing description is taken, with minor alteration, directly from the facts as stated by the Delaware Supreme Court in Duncan, 775 A.2d at 1020-21.

6  Id. at 1020.

7  Id.

8  Id.

9  Id. at 1022.

10  Id.

11  Id.

12  Id. at 1023.

13  Id. at 1024.

14  Id.

15  Id. at 1026.

16  Id. at 1028 n. 26 (quoting Goetz and Scott, Toward a General Theory of Contractual Obligation, 69 Va. L. Rev. at 971-72, cited in note 2).

17  Id. at 1027.

18  Id. at 1028.

19  Id.

20  Id. at 1028 n. 26 (quoting Goetz and Scott, Toward a General Theory of Contractual Obligation, 69 Va. L. Rev. at 974-75, cited in note 2). It is not clear why the court believes that the loss on the mitigator here would be “still greater.” Moreover, in the same footnote, the court observes that as “a practical matter,” the rule favored by TheraTx would “force plaintiffs to sell their shares immediately [upon lifting of the restriction] because they would have nothing to gain from retaining the shares.” It is not clear precisely what the court wants the reader to conclude about the connection between this observation and the plaintiffs’ mitigation obligation. The lack of clarity here is perhaps to be expected because, as discussed in the remainder of this essay, the Duncan court does not have a coherent story to tell about mitigation doctrine as applied in this case.

21  Although the court does offer some explanation as to why the first price is the “higher” intermediate price and the second price, to be subtracted from the first, is the “average”
The Perils of Article 2: Strategies of Interpretation

Recent analyses of Article 2 of the Uniform Commercial Code posit major difficulties with the current statutory treatment of Sales Law. These analyses focus on four major claims: 1) uniformity is itself a misguided effort insofar as we would achieve more efficient regulation of sales through regulatory competition; 2) statutory regulation is subject to interest group capture that may skew statutory regulation of sales law away from socially optimal provisions; 3) judicial construction of Article 2 provisions is more likely than judicial construction of common law contract doctrines to cause interpretive difficulties for commercial parties; and 4) the high level of opting out of Article 2 by commercial parties and industries evinces the failure of Article 2 to provide a workable set of efficient majoritarian default rules.

For the moment, I want to focus on the third, and a bit of the fourth points, primarily on the work of Charles Goetz and Robert Scott, which has deservedly served as one of the major catalysts for deep re-examination of Article 2. Their critique begins with the 1985 work on what they termed the “Expanded Choice” postulate. In that work, Goetz and Scott considered the interplay of implied and express terms. They recognized that state-supplied implied terms could reduce transactions costs and reduce both formulation error by parties and interpretive error by courts through the creation of preformulated terms with widely understood meanings. At the same time, they recognized that preapproval of one set of terms could bias courts against acceptance of apparent efforts to opt out of those terms and could therefore frustrate parties’ efforts to create idiosyncratic or innovative terms. While that article did not explicitly distinguish between interpretive strategies that courts would employ in cases involving contracts governed by the UCC or by common law, it did hint at just that distinction by identifying a tendency of activist interpretive strategies of the type found in Article 2 to increase costs of opting out of state-supplied defaults. They contended that deviations from the common law’s parol evidence rule and plain meaning rule produced interpretive error and created institutional biases in favor of state-supplied terms that threatened the integrity of express terms. The effects of this bias, Goetz and Scott emphasized, are exacerbated by the instructions implicit in Article 2’s liberalization of the circumstances in which courts consider contextual evidence in the form of trade usage, course of dealing, and course of performance to interpret the parties’ express terms. Their suggestion was that, while Article 2 formally retained the admonition that courts should not remake contracts for parties, the new rules of interpretation tended to encourage judicial activism that generated those very results and subsequently diminished the available pool of useful defaults. Postulating that any benefits of increasing the supply of preformulated, state-supplied terms must be balanced against the costs of concomitant increases in interpretation error, Goetz and Scott suggested that judicial intervention to create terms had reached a point of diminishing returns.

Any doubt as to what Goetz and Scott were implying has been resolved by Scott’s more recent work concerning the judicial role in contract interpretation under Article 2 and under common law. In a series of recent essays, Scott has evaluated judicial
efforts to implement Article 2’s strategy of incorporating commercial practice into contractual interpretation. He has contended that even if the UCC accomplished what he termed “formal” uniformity, it has generated an insufficient and, relative to common law, inferior degree of “substantive” uniformity. He defines the result as the “failure” of Article 2, evidenced by the inability of courts to develop systematic default rules with robust acceptance and the consequent withdrawal of whole industries from Article 2 in favor of private adjudication systems more closely aligned with common law interpretive strategies. Moreover, he attributes this failure squarely to the effort to contextualize contract meaning. Indeed, for Scott, courts cannot achieve that objective insofar as they are institutionally incompetent to make the relevant inquiries. In his terms, “the activist approach to incorporation adopted by the Code necessarily increases the stress on courts seeking to minimize errors in interpretation.” As a result, courts interpreting Article 2 cannot properly balance the competing objectives of formalist articulation of readily definable contract terms and functional interpretation that contextualizes contract language. The strong conclusion is that “[t]he abandonment by the Code of the plain-meaning rule has resulted in decisions that strip terms of their meanings and thus erode the reliability of standardized express terms.”

As evidence for these propositions, Scott examines the ways in which courts have interpreted “commercial reasonableness” when that phrase is used to explore the bounds of permissible behavior in Article 2. Scott concludes from his reading of the cases that, notwithstanding Llewellyn’s admonition to use the reasonableness concept to decipher “meaningfully tailored defaults” that specify obligations in particular trades, judges have employed the phrase to deduce commercial obligations from normative conceptions of good commercial practice or other noncontextual criteria. Judicial biases in favor of state-supplied rules not only frustrate efforts to opt out of specific provisions, thus generating wholesale industrial departures from the Code. They also invite parties to engage in a certain degree of sloth in drafting. Parties who anticipate that courts will not feel bound by the parties’ words will underinvest in negotiations that might produce contractual clarity. The conclusion that follows is that formalist interpretation of contractual language, unembellished by contextual addenda, best realizes the tradeoffs between standardized terms and contractual development. Formalist interpretive strategies constrain judges in ways that honor parties’ intent and thus induce them to specify contractual terms, invoking state-supplied defaults when they desire to do so, but similarly rejecting them when they deem appropriate.” Formalism is, of course, not costless. Formalism allows courts fewer opportunities to incorporate customs that ideally generate tailored defaults for subsequent parties who would thereby enjoy low contract formulation costs. But those savings are swamped if a rejection of formalism spawns significant interpretation error.

These claims about contract interpretation are obviously crucial to our understanding of how best to balance the costs and benefits of standardization. My sense is that prior to these examinations, we had no thorough examination of the costs and benefits of interpretive strategies that equally considered the roles of courts and contractual parties. Here I wish to extend and, to some extent question the investigation that Scott and Goetz began and that Scott has explored in his critical analysis of Article 2. My emphasis is on the question of how the motivations of individual judges influence their implementation of different interpretive strategies.

In comprehensively articulating the consequences of different interpretive strategies, Goetz and Scott have treated courts as a black box through which interpretive mandates are processed. Judges receive instructions about how to perform the interpretive enterprise and implement those instructions faithfully. Under common law strategies, therefore, courts are instructed to respect party choices of terms, respectful of plain meanings and oblivious to contextual evidence in the absence of apparent ambiguity. Under Article 2, courts receive and respect instructions to consider context, reconsider ostensibly clear meanings, and privilege state-supplied defaults. Of course, this is not to say that courts implement either of these strategies perfectly, or even competently. To the contrary, implicit and sometimes explicit in the analysis is the claim that judges lack the resources to translate instructions into productive commercial policy. But the analysis assumes that these are institutional difficulties and that judges try their best.

I want to extend the analysis that owes so much to Scott and
by the parties." While the Code more explicitly authorizes judges to engage in this activist strategy when they apply Article 2, the actual extent to which judges will employ such strategies, therefore, may depend critically on their incentives to employ or reject judicial activism. With that in mind, I turn to a plausible set of objectives that might motivate judges in their decision about where to stop on the formalist-contextualist continuum.

**LEISURE**

Consider first the claim that judges, motivated by life tenure or relatively high electoral return rates, fixed pay, limited upward mobility, and the inability to secure the residual benefits of their efforts (which will be internalized by the parties to the litigation), will seek to maximize leisure. To the extent that judges pursue leisure, they will reduce the effort invested in any particular case or opinion. If we compare formalist and what Scott has termed the functionalist strategy of contract interpretation, it seems apparent that formalism requires less investment than contextualism. The former demands attention only to the terms of the contract, defined in accordance with their plain meaning. The latter obligates the court to consider evidence from the trade, from the practices of the parties in other transactions, and from the course of performance by the parties to this particular transaction. The very features of discerning custom that have led commentators to question courts’ competence at that venture — defining the conditions in which the custom is practiced, detecting its frequency, determining the permissible range of variation — demands extensive investigation by courts. Leisure-seeking judges are, therefore, likely to favor formalist interpretations over contextual ones, regardless of the underlying instructions.

**CASE SELECTION**

Even judges who do not maximize leisure will face time constraints. They will have to allocate their time among various cases and may not spend a pro rata amount of time on each case. Judges who face electoral challenges, or who need to avoid the appearance of sloth, or who seek to maximize their relationships with
particular groups, will spend a disproportionate time on cases that enhance their objectives in those fora. (Here it is important to recall that disputes concerning sales law will likely come before state rather than federal judges.) Hence, they will have less time to spend on cases that fall outside these categories. Those cases that have sufficient salience to demand significant judicial investment are unlikely to include the set of cases that revolve around contracts for the sale of goods. Even in those jurisdictions in which judges face election (whether contested or retention), a judge’s position on contract interpretation is unlikely to affect the prospect of electoral victory. As judicial elections become more contentious, so that judicial appointment no longer promises a lifetime position, votes and campaign dollars may depend crucially on judge’s positions on such matters as tort reform, punitive damages, and the death penalty. It is unlikely that proclivity for contextual interpretation in contracts for the sale of goods will become much of a campaign issue or will affect fundraising. Plain meaning versus contextual interpretation is unlikely to favor one particular interest group over another. A commercial actor or consumer who would benefit from one interpretive strategy in one contract may benefit from the alternative strategy in another contract. Since neither commercial nor consumer interests will be unable to predict ex ante which strategy will most benefit the portfolio of contracts of their constituents, these groups have no reason to lobby for the elevation of formal or contextual judges. The result is that even judges who do not seek to maximize leisure are likely to act more “leisurely” with respect to issues of contract interpretation, and thus to tend towards the plain meaning end of the spectrum of contract interpretation.

**Reputation**

Closely related to the desire of judges to devote time to those issues that are likely to enhance their standing with groups that can offer electoral rewards is the more general question of judicial reputation. Judges may wish to maximize fame (measured by citations, or by popular recognition, or by standing in the legal community) for the sake of posterity, to enhance their public exposure, to enhance income (in states where constraints on income enhancement are less strict than those that apply to federal judges), or to enhance the possibility of post-public service private sector employment. A desire for reputation suggests that judges will attempt to craft careful and thorough opinions, demonstrating expertise in a discrete area of the law. Of itself, this motivation would not necessarily favor formalist or contextual interpretive strategies. But reputation enhancement may also require drafting opinions that contain novel or complex theories. An opinion that essentially says: “We accept the dictionary meaning of the terms expressly selected by the parties” will return few reputational benefits. At least that is the case compared to an opinion that scrutinizes the context in which the parties used particular terms and analyzes (or purports to analyze) the way in which other members of the relevant industry have used similar terms. Of course, such efforts may misfire. No teacher of *Columbia Nitrogen* thinks the better of that opinion for its awkward efforts to invoke the customs of the phosphate trade. But that is just the basis of Scott’s telling institutional complaint. Judges who desire to enhance their reputation will have tendencies in the direction of contextualizing contract language because such a strategy provides them an opportunity to demonstrate flexibility and complexity that is unavailable with more formal strategies, even though they are not very adept at their self-assigned task. Thus, reputation-seeking judges are likely to fall towards the contextual side of the spectrum.

**Reversal Avoidance**

Judges likely wish to avoid reversal, either to soothe egos (few of us like to be contradicted) or to increase chances of promotion to higher courts. To the extent that reversal matters, they will take a relatively safe course in reaching their decisions. Of course, to the extent that contract law is state law, and the opinions that define contract and commercial law are primarily state supreme court cases, reversal avoidance may be of little concern. Nevertheless, Scott and Goetz’s primary concern might be with the way in which lower courts actually apply the instructions they receive from appellate court opinions, since trial courts are likely to be the fields on which the battles over interpretive error are
follow precedent may be embellished at the appellate court, but will not necessarily be reversed. If appellate judges seek "correct" answers, then lower courts that seek to avoid reversal will draft opinions that are consistent with the appellate courts' conception of "correct" levels of contextual interpretation.

Thus, reversal avoidance alone will not have incentive effects other than to be parasitic on the objectives of appellate judges. There is, however, one caveat to this conclusion, and it supports Scott's contention that courts that adopt Article 2's methodology are likely to overcommit to context and reduce both certainty of contract terms and the portfolio of usable default terms.\(^23\) Appellate courts that apply a rigid plain meaning rule may reverse decisions that incorporate any context into the definition of express terms. But once an appellate court has approved some level of contextualization, it would be rare to find a decision in which the appellate court believed the lower court took too much context into account. Thus, if lower courts believe that they have latitude to consider some context, and if they are wary of reversal, then judges on these courts have incentives to consider a supraoptimal amount of context in order to convince appellate courts that context has properly been considered. The result is to exacerbate the effect that Scott and Goetz conclude will flow from contextual interpretations.

This cursory review of judicial incentives reveals that, depending on what the individual judge seeks to maximize, the effect that Scott and Goetz perceive is either negated, unaffected, or exacerbated. But the mix of these effects is quite uncertain. In the absence of more information about the frequency of each effect, we have reason to be more agnostic than Scott and Goetz suggest about the differences between common law and Article 2 interpretive strategies. Some incentives that are likely to influence judges push in the same direction that Scott has explicitly warned against—activist deductions of "good" commercial policy. To the extent that judges pursue these objectives, they aggravate tendencies for overriding express terms and the risks of interpretive error. Surely Scott is correct that a return to formalist restraints would be desirable if these incentives dominate. Other incentives, however, paint a more optimistic picture, as they suggest a judiciary less desirous of reconstructing the parties' contract and
more desirous of continuing formalist interpretations, statutory instructions to the contrary notwithstanding.

Is there a way of determining whether one set of incentives or another dominates? We might be able to draw some rough inferences from the frequency with which we perceive formalist or contextual interpretations. That, at least, is what Scott implies in his review of the cases concerning commercial reasonableness and his invocation of industry withdrawal from Article 2. He infers from the available evidence that the first set of incentives dominates. Recall that Scott’s review of the cases suggests that judges systematically seize on the liberalization of the parol evidence and plain meaning rules to create rather than discover commercial law and frustrate efforts to opt out of statutory provisions. His review, therefore, provides some evidence of the superiority of formalist approaches.

But Scott’s data do not necessarily point to a problem with Article 2’s interpretive strategy. We can imagine alternative interpretations of the very evidence he provides. Begin with Scott’s observation that courts consistently interpret the “reasonableness” standards of Article 2 not as inductive findings from commercial norms, which might usefully translate into useful tailored defaults, but as invitations to make “deductive speculations” about appropriate commercial policy. Scott reports that his examination of 55 cases invoking commercial reasonableness revealed 20 cases in which the court performed more than a tangential analysis of the term. Of these, Scott finds that 18 followed a deductive rather than inductive approach. These findings underlie Scott’s proposition about the tendencies of courts. But consider that of the 18 offensive cases, 15 are from federal courts. This is consistent with Scott and Goetz’s reliance on a small set of federal cases to illustrate heavily contextual interpretations of the parties’ express terms under Article 2. What Scott may have discovered is evidence that federal courts are more likely to be activist than their state counterparts. Alternatively, Scott may have discovered that federal courts, which are likely to be less specialized, and perhaps less interested in the mundane details of commercial and contract law than the weighty obligations of federal constitutional law, are simply unversed in the appropriate methodology of contract interpretation. Certainly, this criticism has been applied when speaking of federal court interpretive methodology and opinion writing styles in other areas where they lack expertise.

These alternative conclusions from the data provide far more benign implications for the interpretive strategy of Article 2 than Scott infers. If federal courts have activist tendencies, it is by no means clear that the formalist models of common law would serve as an effective restraint. Given that formalist and contextual interpretations are ideal types that actually fit on a continuum, activist federal courts would unlikely be constrained by the first methodology. If the deductive conclusions of federal courts depict a distinction between federal and state interpreters, then it is by no means clear that Article 2’s methodology, rather than biases in the federal court system, produce the effects that Scott observes. If that is the case, then it may be that state courts, perhaps less activist and more expert in the minutiae of commercial law, produce more useful default rules, or at least fewer deviations from commercial practice, than their federal brethren. I cannot yet make the affirmative claim that this distinction between federal and state courts holds. But until we know the answer, Scott’s data do not allow us readily to conclude that the costs of producing tailored defaults is attributable to substantive instructions of Article 2 rather than distinctions in judicial implementation.

But there is a second piece of evidence on which Scott relies that is not subject to the same criticism. He observes that one cost of nonuniformity is the tendency of industries to withdraw from Article 2 completely. While Scott is careful not to confuse correlation with causation, he suggests that the abandonment of Article 2 is related to a preference for private adjudication procedures that rely more concretely on common law deference to express terms. Here, again, we have at least indirect evidence that those subject to Article 2 consider it to be an inferior source of commercial law than its common law predecessor. But, here again, the evidence is susceptible to interpretation that has little to do with the difference between Article 2 and common law methodology. At the most, we can say that opting into a private adjudicatory system that employs common law formalism is beneficial for those industries that have done so. That says little about those industries that have not created such mechanisms.
More to the point, the fact that industries whose contracts would otherwise be subject to Article 2 have selected private dispute resolution does not necessarily mean that Article 2 precipitated such moves. The industries that seem to embrace bright-line rules tend to be industries that consist of repeat players. In this environment members may discover that private adjudication through a pre-existing trade association not only reduces litigation costs generally, but also provides a more congenial means of dispute resolution than public airings of “family laundry.” If the disputants cleave to plain meanings of contract terms, they may do so out of recognition that, given a desire for cost-savings dispute resolution, context is best ignored given the informal correctives that exist within the repeat play relationship. But that conclusion suggests that there is less need for contextual interpretation rather than that the parties reject Article 2 efforts to utilize it because of its inaccuracy. Even if contextualism produces no more error than formalism, it is certainly more costly to produce, given that fact finders must receive evidence and determine the scope of alleged trade usages. If those costs return few benefits to merchants who have a shared understanding of common terms, or who have other incentives to cooperate when context causes deviation from the plain meaning of contract terms, then we would expect them to opt for less costly formal rules.

We might be more persuaded by the opt-out story if industries not subject to Article 2 did not create private adjudication systems with bright-line rules. If that were the case, then the division between industries that stayed within public adjudication and those that did not might well reflect the substantive law to which public adjudication subjected them. But, as Scott and Goetz early demonstrated, architects also set up private dispute resolution mechanisms. Broker-dealers do the same, though they may have additional incentives, born of fear of federal regulation that might otherwise occur.

Indeed, even some of the industries that have opted for formal rules of interpretation cannot be said to have reacted out of frustration with Article 2. The National Grain and Feed Association, the prototype that Lisa Bernstein uses for her claims about the vacuity of trade usage and that Scott has cited as an industry that employs formal rules, adopted its rules and required members to resolve dispute through arbitration in the first decades of the 20th century, long before promulgation of the UCC.

Obviously, something other than instructions for contextual interpretation caused that move. If there was a desire for bright-line rules, the source of dissatisfaction was common law interpretation, not Article 2.

None of this detracts from the major point and analysis that Goetz and Scott together introduced and that Scott has developed concerning the desire for default rules and the tradeoffs inherent in formulation and interpretation errors. Nor do I contend that the different interpretive strategies of the common law and Article 2 are devoid of consequences for that analysis. My proposed extension of including judicial objectives in the analysis suggests that under some conditions, the consequences may be even more mischievous than they allow. The combination of Article 2’s implicit authority and the incentives of judges to pursue reputation may drive in the direction of rewriting contracts for parties and undermining the development of useful defaults. But under other conditions, judicial incentives for sloth may neutralize the effects that Scott fears. I cannot yet say which of these effects dominates. Thus, I do not yet conclude that the marginal mischief of Article 2 warrants a return to more formalist interpretive procedures.
FOOTNOTES


2 Id. at 291-92.


5 Scott, Uniformity, supra note 3, at 162.

6 Goetz and Scott, supra note 1, at 273-76.

7 Scott, Uniformity, supra note 3, at 164.

8 Id. at 165.

9 Id. at 166-67. See also Scott, Formalism, supra note 3, at 867-68.

10 Goetz and Scott, supra note 1, at; Scott, Uniformity, supra note 3, at 162.

11 See Scott, Uniformity, supra note 3, at 162.


13 See, e.g., Goetz and Scott, supra note 1, at 314 (citing non-Code cases in which courts employ context evidence to override plain meaning of words such as “wife” and “alimony.”).

14 See Scott, Rise and Fall, supra note 3 at n. 145 (indicating that courts properly reject both “pure textualism” and “pure contextualism”).


21 The only caveat would be that some courts might apply the more liberal interpretation rules of the Second Restatement of Contracts even to non-goods sales contracts, but presumably lower court judges would first await a signal from the state supreme court that the Second Restatement approach should be adopted. By and large, however, a desire to avoid reversal would not distort the interpretive approaches that common law and Code otherwise signal judges to pursue.


23 See, e.g., Scott, supra note 3, at 47-48.

24 Scott, Uniformity, supra note 3, at 166.

25 Id. at 185 n. 68.

26 Id. The two “inductive” cases are both from federal courts, but the sample seems too small to infer much from that.

27 They rely on cases that have become well known in commercial law texts, including Brunswick Box Co. v. Coutinho, Caro & Co., 617 F.2d 355 (4th Cir. 1980); Nanakuli Paving & Rock Co. v. Shell Oil Co., 664 F.2d 772 (9th Cir. 1981); Columbia Nitrogen Corp. v. Royster Co., 451 F.2d 3 (4th Cir. 1971). See, e.g., Scott, Rise and Fall, supra note 3 at n. 147; Scott, Uniformity, supra note 3, at 194 n. 59.


29 See Scott, Rise and Fall, supra note 3, at 48.

30 See, e.g., Scott, Uniformity, supra note 3, at 197-74; Scott, Rise and Fall, supra note 3, at 48-49.

31 See Jody S. Kraus and Steven D. Walt, In Defense of the Incorporation Strategy, in Kraus and Walt, supra note 3, 193, 215 (concluding that Lisa Bernstein’s study of the National Grain and Feed Association’s private system “establishes only that the NGFA provides a superior interpretive regime for the members of the NGFA”).

32 This is one of the arguments that Jody Kraus and Steven Walt make against the inferences from Bernstein’s data. See id.


34 See Scott, Uniformity, supra note 3, at 172; Scott, Rise and Fall, supra note 3, at 48.

35 See Bernstein, Questionable, supra note 33 at 725; Bernstein, Merchant, supra note 33, at 177-72.
either rise (increasing the value of the contract) or fall below the contract price (making the contract a losing bet that the buyer regrets). Once the seller repudiates, however, he forfeits his right to enforce the agreement at the time of performance and thereby relieves the buyer of the risk of regret. The time-of-performance measure effectively compels the seller to write a call option to the buyer. The aggrieved buyer benefits from declines in the market price below the contract price because she can walk away from the contract; but the repudiator insures her against the risk that the market price will rise above the cover price prevailing at the time of repudiation. On Jackson's analysis, the buyer's ability to thereby speculate at the expense of the seller is undesirable because it prevents some efficient breaches by raising the cost of repudiation to the promisor above the amount necessary to compensate the aggrieved party's expectancy. In contrast, the time-of-repudiation measure prevents such speculation by requiring the aggrieved party to mitigate at the time of repudiation rather than waiting until the time of performance. It will therefore never prevent an efficient breach.

Although it reflected state-of-the-art economic analysis of its day, Jackson's article in many ways misses the economic point of anticipatory repudiation. First, Jackson's justification for measuring damages at the time of repudiation seems gratuitous on its face. The sole purpose of anticipatory repudiation is to trigger the duty to mitigate prior to the time of performance. Yet the time-of-performance measure relieves the aggrieved party of that duty. That it would also prevent efficient breach by raising the costs of repudiation above the aggrieved party's expectancy may be interesting, but seems trivial compared to the independent observation that the repudiating party would have nothing to gain from repudiating under such a rule. Since the promisor would know that the aggrieved party has the option of waiting until the time of performance to mitigate, it would have an incentive to repudiate only if it believed the aggrieved party's fear of undercompensation would lead it to mitigate before the time of performance, thereby sacrificing the value of its option to speculate at the repudiator's expense.

Second, Jackson's analysis rests entirely on the claim that the repudiating party forfeits its right to enforce the agreement at
the time of performance. Yet both the common law and the Code allow repudiators to retract their repudiation before the promisee accepts or relies on the repudiation. Jackson’s analysis applies only to a version of the doctrine that allows the aggrieved party to accept the repudiation as final at the time of repudiation and still wait until the time of performance to mitigate. But a repudiation rule that allowed the repudiating party to retract any time before the aggrieved party mitigates would eliminate the promisee’s opportunity to speculate at the repudiator’s expense. Even if damages were measured at the time of performance, the rule would be immune from Jackson’s critique.4

Third, Jackson examines the economic rationale for anticipatory repudiation in the context of thick markets. Yet as Jackson notes, the only economically justified reasons for breaching in a competitive market with full compensation “stem either from informational or transactional cost advantages in covering which one party enjoys over the other, or from a use of the contract goods by the aggrieved party which, although profitable at the old price, would not be economical at the new price.”5 As several commentators have persuasively argued, the cost of cover for sellers and buyers in thick markets is unlikely to be different at the time of performance, and even less likely at the time of repudiation.6 And while changes in market prices sometimes will render the buyer’s contemplated use of contract goods uneconomical, this does not by itself explain why breach would be efficient in a thick market. Given that the buyer can choose to resell, rather than use, the contract goods, breach is not required to avoid the wasteful use of goods. At the same time, we know that it will sometimes be rational for promisors to breach in thick markets because damages for breach are systematically undercompensatory. If thick market breach is more likely to be motivated by the prospect of strategic exploitation of systematic undercompensation than the prospect of nonstrategic exploitation of differential cover costs, then the same would be true for breach by repudiation: In thick markets, the doctrine of anticipatory repudiation is more likely to encourage strategic behavior rather than efficient mitigation.

However, even if benign motives for breach in thick markets were more common than malign ones, it is still difficult to explain why a risk-neutral party would breach by anticipatory repudiation in thick markets. Jackson explains that the forward price for commodities in a thick market reflects the market’s best guess of the future spot market price, and also impounds the market’s aggregate risk averseness. He also notes that risk neutral promisors, in particular, would be indifferent between promisees mitigating by cover at the time of repudiation or performance. Despite this observation, Jackson proceeds to consider when damages should be measured for anticipatory repudiation in thick markets. Given the implicit assumption that the repudiator cannot retract, and that the aggrieved party therefore can speculate at the repudiator’s expense, Jackson argues for the time-of-repudiation rule in order to allow efficient breach. But Jackson’s own analysis should have led him to conclude that no one would have reason to repudiate in a thick market because prospective breachers in such markets would be indifferent between mitigation before the time of performance and mitigation at the time of performance. Were this logic compelling, it would suffice to undermine the justification for allowing anticipatory repudiation in thick markets, and therefore eliminate the need for Jackson’s inquiry. Although some progress has been made since Jackson published his article, there is not yet a satisfactory explanation of why risk-neutral parties contract in a thick market. It may be difficult to analyze the best remedy for repudiation in the absence of a prior explanation of the point of contracting in the first place.

Fourth, Jackson’s analysis focuses exclusively on the goal of facilitating efficient breach. Yet the intervening two decades of economic analysis, and the analysis of incomplete contracting in particular, have demonstrated that a contract’s efficiency must be measured both ex post (whether it facilitates efficient breach) and ex ante: whether it induces efficient reliance. Although expectancy induces breach, it does so by compensating the promisee for the value the promisee would have received from performance given all of its reliance investments. The promisee therefore has no incentive to condition its reliance on the probability of the promisor’s performance. Thus, the expectancy damage measure creates the incentive for promisees to engage in more reliance than is socially cost-justified given the actual
probability of performance. Because it focuses exclusively on ex post efficiency, Jackson’s analysis fails to consider whether the doctrine of anticipatory repudiation might promote the equally important objective of achieving ex ante contractual efficiency.

Five years later, Charles Goetz and Robert Scott subjected anticipatory repudiation to further economic analysis in their study of the mitigation principle. Following Jackson, they begin by considering the efficiency of anticipatory repudiation in thick markets. In thick markets, they argue, promisors have little need to require promisees to adjust to changes in the promisor’s probability of performance because promisors can adjust “autonomously” by covering themselves. Thus, the only legitimate purpose of anticipatory repudiation in such contexts is to allow promisors to shift the burden of cover to promisees when the promisees’ cost of cover are lower. But they believe that in thick markets the likelihood that promisees will have significantly lower cover costs than promisors is very low. On the other hand, given that the common law doctrine of anticipatory repudiation does not require a clear, unambiguous signal of repudiation, it creates an opportunity for promisors to evade their obligation and for promisees to act opportunistically to exploit the repudiator. In light of these potential abuses of anticipatory repudiation, and the relatively small potential efficiency gains from repudiation in a thick market, Goetz and Scott claim that commercial parties would prefer an anticipatory repudiation rule that required repudiations to be clear and unequivocal and that in thick markets, the common law anticipatory repudiation rule is probably not worth the candle.

Goetz and Scott then advance beyond Jackson’s analysis by considering whether the anticipatory repudiation rule might facilitate efficient adjustments in thin markets. In specialized contracts for customized goods or services, and in contracts for goods or services otherwise sold in thick markets but where buyers make contract-specific investments, optimal pre-performance adjustments will consist in “internal readjustments” by the promisee in response to changes in the probability of the promisor’s performance, rather than cover. But Goetz and Scott observe that the common law repudiation doctrine potentially undermines the promisor’s incentive to inform the promisee of changes in his estimates of the probability of his performance. Under the common law repudiation doctrine, any promisor that communicates a decrease in the probability of his performance risks subsequent determination by a court that he breached by repudiation. Goetz and Scott call this the “breacher status problem.” To cure this problem, they argue that in thin markets the anticipatory repudiation rule should be modified to allow promisors to request adjustments by promisees without risk of triggering a repudiation. Under their proposed adjustment regime, the promisor would ultimately have to pay the costs of any adjustments he requests whether he breaches or performs. But the promisee would make the requested adjustments on credit. To protect the promisee against undercompensation in the event of breach, the promisor would be required to provide security for the promisee’s adjustment expenditures.

Goetz and Scott’s proposed adjustment regime is designed not only to ameliorate the breacher status problem, but also to overcome the motivational barriers that prevent the promisor and promisee from cooperating to secure efficient pre-performance adjustment. Without the power to compel the promisee’s adjustments, a promisor that informs the promisee of a reduced probability of performance must rely on the promisee’s unilateral decision to make cost-effective adjustments. But given that expectancy damages entitle the promisee to reimbursement for all its reliance costs, whether or not it was efficient to incur them, the promisee has no incentive to make efficient reductions in its reliance when it learns of the promisor’s reduced probability of performance. Indeed, all else equal, the promisee gains by maximizing its reliance on the promisor’s performance without regard to the probability of the promisor’s performance. Goetz and Scott’s adjustment regime mitigates the promisee’s incentive to maximize, rather than optimize, its reliance by empowering the promisor to compel the promisee to make pre-performance adjustments, rather than leaving the decision to make pre-performance adjustments to the promisee. On the other hand, since the promisor gains nothing from the promisee’s reliance after the contract is formed, and the expectancy rule makes him liable for all of the promisee’s reliance in the event of breach, the promisor will, all
else equal, gain by ordering the promisee to minimize, rather than optimize, its reliance on the promisor's performance. Goetz and Scott's adjustment regime mitigates the promisor's incentive to order the promisee to make inefficient reductions in its reliance by requiring the promisor to pay the costs of all the adjustments it orders the promisee to make.

So conceived, Goetz and Scott's regime constitutes a novel and creative approach to removing the motivational barriers preventing efficient pre-performance adjustments. Its critical insight is that efficient adjustment decisions will be made only if the decision-maker fully internalizes the costs and benefits of any potential adjustments. Under expectancy damages, the promisor already internalizes all the benefits from reductions in the promisee's reliance. By requiring the promisor to reimburse the cost of the adjustments it orders the promisee to make, Goetz and Scott's adjustment regime also forces the promisor to internalize all the costs of the adjustments he orders. Finally, any regime that requires the promisee to determine optimal pre-performance adjustments runs afoul of the promisor's comparative advantage in estimating his own probability of performance, and his incentive to under-state that probability to the promisee. By empowering the promisor to direct the promisee's adjustments, Goetz and Scott's regime eliminates the need for the promisee to estimate, let alone prove, the promisor's probability of performance. Their compact proposal, then, manages to incorporate many of the fundamental insights of the economics of agency and information long before contract law scholarship began to do so systematically.

However, at a minimum, one party can identify optimal adjustments only if it can observe both the promisor's probability of performance and the promisee's costs of adjustment. Goetz and Scott's adjustment regime obviates the need for the promisee to observe the promisor's probability of performance only by requiring the promisor not only observe, but also verify (i.e., be able to prove in court) the promisee's costs of adjustment. Under Goetz and Scott's regime, once the promisor orders the promisee to make an adjustment, it becomes liable to the promisee for the costs of that adjustment. Their regime thus not only requires the promisor to estimate the promisee's costs of adjustment when deciding which adjustments the promisee should make, but also requires him to prove those costs in court. These costs include not only the out-of-pocket expenses of any affirmative measures the promisee is ordered to undertake, but also the foregone expected benefits of any reliance it is ordered to avoid. While the former occasionally may be provable in court, the latter typically will be speculative and thus unverifiable. Because courts routinely refuse to grant speculative damages, they would be likely to discount the promisee's expected benefits from reliance. Because promisors would anticipate the prospect of under-compensating the promisee for her costs of adjustment, promisors operating under Goetz and Scott's regime would have an incentive to order inefficient reductions in the promisee's reliance. Moreover, because any reduction in the promisee's reliance reduces its gains from performance, even a good faith promisor would be unable to rely on the promisee's representations of its costs of adjustment when attempting to determine what adjustments would be efficient for the promisee to make. Thus, even if we grant the arguable assumption that promisors can observe the promisee's costs of adjustment, unless those costs are also verifiable Goetz and Scott's regime will play no role in facilitating efficient adjustments. The utility of Goetz and Scott's regime is therefore limited to facilitating only those efficient pre-performance adjustments that occasion verifiable costs.

In this essay, we build on the lessons gleaned from these early economic analyses of anticipatory repudiation to analyze how anticipatory repudiation might improve ex ante and ex post efficiency in a regime of expectancy damages. Because we share Goetz and Scott's view that there are no significant efficiency gains from repudiation in thick markets, we limit our inquiry to thin market contracts, or contracts in which promisees make contract-specific investments. When a promisor repudiates, the doctrine of anticipatory repudiation effectively compels the promisee to mitigate her damages or, in Goetz/Scott terms, to invest in “adjustments” to minimize her exposure to loss. For the purposes of the ensuing discussion, we consider only the more basic requirement that, upon repudiation, the promisee halt further investment in reliance on the repudiated promise.
purposes of this essay, we consider the effect of anticipatory repudiation on expectancy damages. In evaluating the merits of the anticipatory repudiation rule, it is helpful to bear in mind the economic rationale for expectancy damages. If the court had perfect information, it would simply specifically enforce a contract whenever it is ex post efficient: that is, where the value of performance to the promisee exceeds its cost to the promisor. However, when the court can verify the value but not the cost of performance, it can achieve ex post efficiency by awarding expectancy damages equal to the value of performance. As a result, the promisor internalizes the cost of breach to the promisee and performs when and only when it is ex post efficient.

Although expectancy damages can achieve ex post efficiency with less than perfect information, they still require substantial information to be available to the court, particularly in thin markets where the value of a promise depends on the reliance expenditures of the promisee and where market prices provide incomplete evidence of value. In some cases, the court might observe the promisee’s reliance expenditures and apply a rate of return in order to estimate expectancy. Expectancy damages would be trimmed accordingly upon repudiation, to equal the sum of (i) the expected contract payoff from pre-repudiation reliance and (ii) the expected (net) return from reliance that either occurred subsequent to repudiation or would have occurred but for the repudiation. In particular, the doctrine denies the promisee recovery of the cost of post-repudiation investment. Depending on the information available to the court, an alternative approach is to verify directly the expectancy that the promisee would have enjoyed in the absence repudiation and to subtract the cost of post-repudiation reliance. As we will discuss, either of these measures impose a higher information requirement than expectancy damages alone because post-repudiation reliance is likely to be a hypothetical matter.

II. ANTICIPATORY REPUDIATION AND EFFICIENT RELIANCE

When a promisor repudiates his promise, the doctrine of anticipatory repudiation deprives the promisee of her breach claim with respect to any reliance incurred after the repudiation that could not be feasibly avoided. The doctrine thereby sets a ceiling on breach damages, whether they are based on reliance or expectancy, as well as on the enforcement of liquidated damages. For the purposes of this essay, we consider the effect of anticipatory repudiation on expectancy damages. In evaluating the merits of the anticipatory repudiation rule, it is helpful to bear in mind the economic rationale for expectancy damages. If the court had perfect information, it would simply specifically enforce a contract whenever it is ex post efficient: that is, where the value of performance to the promisee exceeds its cost to the promisor. However, when the court can verify the value but not the cost of performance, it can achieve ex post efficiency by awarding expectancy damages equal to the value of performance. As a result, the promisor internalizes the cost of breach to the promisee and performs when and only when it is ex post efficient.

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(A) Repudiation might improve ex ante investment incentives under expectancy damages regime

Ex post efficiency does not require enforcement by expectancy damages: it may well occur in the absence of an executory contract
because the parties are free to conduct an exchange if it is efficient to do so. Yet, without the protection of a binding promise, parties avoid making specific investments in anticipation of an exchange because of the prospect of hold-up in the bargaining over the terms of exchange. The legal enforcement of executory contracts by expectancy damages addresses the problem of underinvestment. However, contracts enforced by expectancy damages also create incentives for inefficiently high reliance by the promisee. This “overinvestment” problem is due to the fact that expectancy damages guarantee the promisee a return from her reliance investment, whether or not the contract exchange occurs. The severity of overinvestment therefore varies with the probability that the promisor will not perform.

The repudiation rule addresses the overinvestment problem associated with expectancy damages by compelling the promisee to cease its specific investments upon repudiation. The probability of performance varies as uncertainty resolves during the term of the contract. When it falls below a threshold, the promisor repudiates and compels a halt in the reliance of the promisee. However, the repudiated exchange might subsequently become attractive again and the parties may strike a new deal. If so, repudiation of the initial contract may have led the promisee to forego valuable specific investments in that opportunity. The promisee may have underinvested in fear of hold-up in renegotiations with the promisor in the second contract. The value of a future exchange, should it occur, will be correspondingly lower. In sum, in uncertain environments, a simple contract with expectancy damages induces overinvestment, while repudiation gives rise to underinvestment (for the same reason as that which arises in the absence of a binding contract). The promise of anticipatory repudiation in this respect is that it will occur when underinvestment is less inefficient than the overinvestment that would otherwise result.

Anticipatory repudiation may also improve ex post efficiency. The promisor’s outside opportunities (for example, a seller’s alternative buyer) may arise during the course of the contract. The promisor’s incentive to breach may depend on whether he will be liable to the promisee for all, or just a portion, of the promisee’s reliance. Therefore, if the promisor can compel the promisee to cease its reliance, the promisor may exploit an alternative opportunity that might not have been feasible if the promisor were liable for the expected return on the promisee’s reliance through the time of performance. Thus, if the promisor can repudiate and avoid the liability for all subsequent reliance, then he will compare the projected expectancy of the two competing projects and choose the one that yields the highest return. If the outside project is the more profitable, the opportunity to repudiate may lead to efficient breach which would otherwise not occur.19

A contract gains value directly from the ex ante and ex post efficiencies described above, as well as indirectly from the fact that the ability to repudiate, and thereby prevent future reliance investments, makes it efficient for parties to enter their initial contract earlier in time. The parties may thereby further enhance the returns from reliance by allowing for a longer period of time during which they may be distributed. In particular, with the enhanced opportunity to revisit their bargain throughout their relationship as uncertainty resolves itself over time, the parties may contract even if the expected cost would otherwise exceed the expected value. A contract with termination rights is functionally equivalent to an installment or staged contract. In real options terms, the option to abandon in midstream raises the value of initiating the contract and makes it feasible even though the conventional net present value calculation may not justify it.20

(B) Information conditions necessary for repudiation to be efficient

In a world of incomplete information, the doctrine of anticipatory repudiation achieves a second-best investment result by exploiting information available to the promisor and not the court (that is, observable but not verifiable). The value of the repudiation rule, therefore, depends critically on the information that is verifiable. For repudiation to be both feasible and valuable, the court’s information must fall within a fairly narrow range. Outside this range, the doctrine of anticipatory repudiation is either ineffective (if the court has too little verifiable information) or superfluous (if the court has too much information).

We illustrate with the following simple example. At t0, Seller agrees to deliver a widget to Buyer at t2 and Buyer pays the price...
If the court awarded simply \( V(s_1) \) and ignored \( s_2 \) completely, the Seller would not fully internalize the Buyer's lost expectancy and would breach too often. One might suggest, instead, that the court use the efficient level, \( s_2^* \), and award \( V(s_1, s_2^*) \). But, this would require the court to verify \( s_2^* \) and, if the court can verify \( s_2^* \), it would presumably also be able to verify \( s_1^* \). If so, it could directly induce efficient reliance by awarding \( V(s_1^*, s_2^*) \). In that case, the repudiation doctrine would be superfluous because expectancy damages alone would be conditioned on, and thereby assure, efficient reliance. Thus, the informational conditions necessary to support the case for anticipatory repudiation are very narrow indeed: The court must be able to verify \( V(s_1, s_2) - s_2 \) (based on an estimated \( s_2 \)), but unable to verify optimal reliance levels.

(C) Promisor's incentives to repudiate prematurely

The promise of anticipatory repudiation described above is that it provides a second best solution to the problem of achieving the ex ante efficiency of investment when the information necessary to police reliance directly is not verifiable. The mitigation requirement triggered by repudiation also may improve the efficiency of breach decisions with respect to exclusive outside opportunities that appear midstream in the contract term. These gains come from exploiting information observed by the promisor during the term of the contract that cannot be verified to a court. Yet, it is not always optimal to assign decisions to the best informed agent when that agent's interests conflict with the principal's. The realization of the potential gains from repudiation depends on whether the promisor has the appropriate incentives to repudiate. As we observe below, the promisor's option to terminate her contract unilaterally, together with the inability of the court to verify factors such as the probability of performance at repudiation or the likely prospective hypothetical subsequent reliance, raise significant concerns about the efficiency of the promisor's repudiation incentives. In particular, we note three reasons why the promisor fails to internalize the costs of her repudiation decision.

First, we observed that the promisor's repudiation addresses
the overinvestment incentive of the promisee in the face of a low probability of promisor performance, but it substitutes an underinvestment problem in light of the possibility that the contract exchange may later prove valuable. The second-best is achieved if the efficiency cost of underinvestment following repudiation is less than the cost of overinvestment without repudiation. Although the promisor may have an informational advantage over the court in bringing reliance to a halt, the promisor does not internalize the efficiency loss from underinvestment. In particular, if the promisor repudiates and trade subsequently occurs under a new contract, the surplus will be smaller because of the underinvestment. Given that the surplus is shared between the parties according to their bargaining power, the promisor will internalize only a portion of the loss from underinvestment (unless he is a monopolist). In contrast, if he does not repudiate, the promisor bears fully the efficiency cost of overinvestment in the form of higher liability in the event of breach. As a result of this asymmetry in his internalization of the costs of under- and overinvestment, he may repudiate inefficiently: that is, too soon or too often.

Second, the rationale for permitting the promisor to repudiate is that the court cannot verify the information necessary to enforce the optimal reliance by the promisee, at least partly because the court cannot evaluate the probability of performance as it evolves through the contract term. However, when a contract is terminated by repudiation, the court cannot verify the full value of the promisee’s expectancy because of the remaining uncertainty as to the state of the world at the time performance was due and because the promisee has not actually completed her reliance investment. The court’s midstream information deficiency in this respect can backfire against the rationale for the mitigation doctrine because of the judicial reluctance to award speculative damages. The standard case for expectancy damages assumes that the court can verify the value that would have been yielded by performance if the promisor had performed, in light of the actual reliance of the promisee. If the promisor anticipatorily repudiates, the court must speculate both as to the likely state of the world that would exist at the time of performance and the promisee’s likely reliance investment. Therefore, it is more likely that the court will find the promisee’s expectancy to be speculative in the event of repudiation as opposed to breach at the time for performance. The court is correspondingly more likely to limit the award of damages when the promisor repudiates rather than breaches.

The promisor can exploit the relative information deficiency of the court and the judicial reluctance to award speculative damages by repudiating midstream and paying lower damages than the expected amount he would be held liable for at the time performance is due. Therefore, the promisor has excessive incentive to repudiate, leading to underinvestment that may be even less efficient than the overinvestment that would occur without repudiation. Moreover, because the promisor fails to internalize fully the lost prospective expectancy of the promisee, he may also repudiate inefficiently to pursue an alternative, exclusive project.

Third, in many contracts, the promisee’s promise is also enforced by expectancy damages and the promisee has a reciprocal right to repudiate. Both parties have valuable repudiation options, each of which is terminated by the repudiation of the other. The promisor’s repudiation deprives the promisee not only of the expected value of the contract to the promisee, but also of the value of her repudiation option. Under the conventional expectancy measure, the loss of the repudiation option is not compensated and not internalized by the promisor, leading the promisor to repudiate inefficiently. Even if the measure of expectancy damages were revised to incorporate the loss of breach options, it is unlikely that a court would have the information necessary to calculate the option value.

III. CONCLUSION

In sum, the value of anticipatory repudiation depends on restrictive assumptions about the verifiability of information to the court and the amount of reliance investment remaining to be made at the time of repudiation. It is further constrained by the incentives for promisors to repudiate inefficiently. Therefore, it is very plausible that some parties may wish to exclude the right to repudiate from their contract. As the law stands, they cannot do so unless they also forfeit the right to
have the contract enforced by expectancy damages. This analysis suggests that the doctrine of anticipatory repudiation is an undesirable mandatory rule. We have also shown that the rule may be suspect even as a default, although more work would need to be done to make that case decisive.

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FOOTNOTES

3 See Farnsworth on Contracts (Second Edition), § 8.22; Restatement (Second) of Contracts, § 256(3); U.C.C. § 2-611.
4 Arguably, this is close to the majority interpretation of the common law and Code anticipatory repudiation rule: In both kinds of cases, the avoidable loss doctrine would require a promisee that treats a repudiation as final to mitigate at that time. Absent acceptance or reliance, however, courts are more tolerant of promisees that delay mitigation, even until the time of performance.
5 Jackson, p. 89, n. 59.
6 See e.g., Goetz & Scott, supra note 1, at 990 (1983); Schwartz & Scott, Sales Law and the Contracting Process (Second Edition), pp. 338-39.
7 Jackson, supra note 2, at 83-86.
8 Jackson supra note 2, at 84.
9 See Goetz & Scott, supra note 1.
10 Goetz & Scott, supra note 1, at 990.
11 Goetz & Scott, supra note 1, at 995.
12 For example, a contract to sell oil to a utility company ordinarily is a thick market contract because the market for oil is robust and highly competitive. But if the oil company makes a contract-specific investment, such as building a pipeline that is useful only for delivering oil to the utility company, the contract becomes equivalent to a thin market contract.
13 For example, a buyer’s internal adjustment “might involve altering production schedules to accommodate the increased risk of breach, or adjusting requirements to accept imperfect or otherwise altered performance.” Goetz & Scott, supra note 1.
14 Id.
15 We set aside the potentially offsetting incentives that the risk of undercompensation provides for the promise to adjust its reliance efficiently to reflect the probability of the promisor’s performance.
16 In the alternative, if courts were sympathetic to promisees’ representations of their expected gains from foregone reliance, notwithstanding the speculative nature of those gains, the promisees would have an incentive to over-state their costs of adjustment. Promisors would therefore have an incentive to allow promisees to engage in over-reliance to avoid over-compensation.
17 We set aside considerations relating to the insolvency risk of the promisor, which are discussed in Richard Craswell, Insecurity, Repudiation, and Cure, 19 J. Legal Stud. 399 (1990).
18 The strategic determination of the threshold weighs the reduction in breach liability effected by the cessation of the promisee’s reliance against the value of the option to perform that is surrendered by repudiating. The calculation is analyzed in depth in Alexander J. Triantis and George G. Triantis, Timing Problems in Contract Breach Decisions, 41 J. Law & Econ. 163 (1998).
19 In this sense, we are building on Jackson’s point that repudiation may yield more efficient breach than breach occurring at the time for performance. See supra note 2. However, we suggest that the prospect for more efficient breach hinges on the effect of repudiation on the promisee’s reliance.
21 Litigation delay will reduce somewhat the relative informational deficiency facing courts in anticipatory repudiation cases. If litigation is delayed beyond the contract date of performance, the court’s information about the state of the world at the time of performance will no longer be probabilistic. Thus, courts have in fact been less likely to treat expectancy in anticipatory repudiation cases as speculative when deciding the dispute after the time of performance. Even at the time performance is due, however, the court would have difficulty guessing what promisee’s reliance would have been had the promisor not repudiated and whether that level would have been efficient.
22 This argument is elaborated in Triantis and Triantis, Timing Problems, supra note 18.
Contract Law and Macroeconomics

At a conference celebrating Law and Economics at the University of Chicago, Ronald Coase drew a distinction between two different varieties of law and economics. One employs the tools of economic analysis to try to explain or improve the content of legal rules. Coase allowed that he had no particular interest in law, and therefore no interest in this brand of Law and Economics. The other type, and the one that interested him, was the study of how law affects the functioning of the economic system.

Coase did not attempt to give catchy titles to these two types of scholarship, but I will do so here. Let me refer to the first as “law and microeconomics” and the second as “law and macroeconomics.” I don’t claim that these names are perfectly descriptive, but they perhaps convey some flavor of the difference between these two types of scholarship.

This paper will make two claims. First, the next seminal advances in contracts scholarship will come from law and macroeconomics as I have just defined it. Second, those who write that scholarship will find a useful starting point in my personal favorite from the Goetz/Scott oeuvre, their article “Enforcing Promises: An Examination of the Basis of Contract.”

LAW AND MICROECONOMICS

When Charlie Goetz and Bob Scott wrote their remarkable series of articles on contract law, they mostly followed the dominant paradigm, which was law and microeconomics. Typified by Richard Posner’s magisterial textbook, law and economics in the late 1970s and early 1980s was all about providing positive explanations, and occasionally normative critiques, of legal doctrine using standard tools from the microeconomist’s toolkit. Scholars asked what incentives legal rules created and how individuals’ behavior might change had a different rule been selected.

A classic example is the Goetz and Scott examination of mitigation rules. To those approaching contract law from a deontological perspective, the mitigation principle must seem very odd indeed. The morally blameless non-breaching party is asked to take expensive action to reduce the damages for which the morally blameworthy breaching party would otherwise be responsible. The first time a law student encounters the principle, his or her predictable instinct is to lament “it’s just not fair.”

In the time-honored approach of law and economics, however, Goetz and Scott demonstrated that this untutored lament is not merely naive, but also wrongheaded. Here the economist’s “no free lunch” tenet takes the stage first. The better the deal a promisee gets in the event of breach, the worse the deal he will get at contract formation. The prices of contractual promises will adjust to reflect the rule of damages. Thus, putting the breaching party on the hook for greater damages does not make the non-breaching party better off in expected value terms.

Finally, the spotlight falls on a notion analogous to the law of comparative advantage. Recall that Ricardo’s analysis tells us
that even if A can produce everything at lower cost than B, it still makes sense for A to specialize in what she does best, and B to specialize in what he does best, and for them to engage in exchange. Similarly, it may be that the promisor has an absolute advantage over the promisee at all aspects of the performance, including the mitigation of loss. But comparatively speaking, the promisee may be better at altering his activities so as to reduce the harm that follows from a breach. It may therefore make sense for the promisor to, in effect, purchase these mitigation services from the promisee and devote the time to performing on other, similar contracts with other promisees.

Throughout the analysis, the Coase Theorem hovers in the wings. Even if the legal rule permitted the non-breaching party to sit back and do nothing, putting the burden of mitigation on the breaching party, if the comparative advantage story is true the parties could just bargain around the legal rule to move the burden back to the non-breaching party. So legal doctrine can, at best, save the parties the cost of bargaining by providing the rule that most parties would bargain for given the chance.

But, as every teacher of contract law soon learns, this insight is a double-edged sword. When the Coase Theorem is applied too liberally, the analysis takes a demoralizing turn because every rule could be replaced with its opposite and, so long as there are no transactions costs, nothing would change. So at some point, we need to assume transactions costs in order to make the whole business matter. But doing so is tricky. Contract law is the one area in which, by definition, we cannot say that the parties face insuperable barriers to bargaining. If they did, they’d be in the Torts casebook and not the Contracts casebook. As a result, the selection of that critical moment when transactions costs enter the analysis can seem to the jaded observer—or the innocent first-year law student—to be quite arbitrary.

Consider the analysis of the mitigation principle. It is critical to the Goetz and Scott story that transactions costs enter the picture at just the right time. Why do we conclude that the choice of a mitigation rule has no distributive consequences? Because prices will adjust. In short, there are no barriers to the parties undoing the rule’s distributive effects by bargaining.

Why, then, does the choice of a mitigation rule have efficiency consequences? Because transactions costs are just high enough to make it problematic for the parties to specify that the non-breaching party should mitigate.

The arbitrariness of assumptions about transaction costs seems to be an intuition underlying standard criticisms of law and economics by scholars employing political analyses, typically from a leftist perspective. Their principal interests lie in uncovering and critiquing law’s distributive consequences. They see law and economics scholars as dismissive of those interests. Perhaps one reason is that transactions costs rarely get in the way of concluding that parties will undo the crudely redistributive rules beloved of some contracts scholars, but transactions costs do arrive on the scene in time to make it interesting and important that the rule in *Jacob & Youngs v. Kent* came out the way it did and not the opposite.

The arbitrary nature of the “find the transaction cost” game makes it unlikely, in my view, that the future of contracts scholarship lies in the tried-and-true economic analysis of why the common law selected Rule A in preference to Rule B. Indeed, the scholarship on contracting within economics itself seems to focus heavily on instructing contracting parties on what terms they should bargain for and very little on what default rules the legal system should provide. Implicitly, the economists appear to assume that transaction costs are generally low enough to make the selection of the default rule uninteresting in comparison to the parties’ selection of the optimal term.

Scholars have found one clever way of avoiding this problem. One can decide that the issue is not transactions costs as traditionally conceived—the time, effort, and expense involved in striking a deal—but information. Default rules, then, are not selected based on what most contracting parties would choose, but instead based on what will facilitate disclosures that will solve the parties’ informational asymmetry.

Legal scholars are increasingly drawn to the problem of designing contract rules to cure information problems, as typified by the debate over the default rule in *Hadley v. Baxendale.* In Ayres and Gertner’s analysis, the rule is a very clever way of avoiding an informational asymmetry—by denying consequen-
future events. But we still need to address a separate issue: what is the significance of the fact that the government provides the enforcement mechanism?

An interesting role reversal has taken place in recent years between legal scholars and economists with respect to that question and analogous ones in other areas of law. Under the influence of the rapidly growing literature on social norms, legal scholars have begun to downplay the importance of the formal mechanisms of contract enforcement. Cooperative behavior, they correctly note, does not begin with the state, nor does it in all cases require a government in the Weberian sense of an entity with a monopoly over the legitimate use of force. Game theory demonstrates that in the right circumstances, contracts can be self-enforcing. That means it is in each party's interest to keep his promise, given his expectations of how the other party and other members of the community will behave toward those who break promises.

At the same time that legal scholars have become interested in non-legal means of producing cooperative behavior, economists have argued with increasing force that a well-functioning legal system is essential to prosperity. The line of attack has been largely empirical. An impressive body of literature provides evidence that countries that enforce property rights and contracts experience more rapid economic growth than those that do not. The associated theory, however, is straightforward. One of the keys to growth is investment. Investment is by definition a forward-looking enterprise that involves foregoing consumption today in order to purchase long-lived assets (which may be physical assets or intangible assets such as promises). In order for the purchaser to obtain value, the asset must be secure from theft or damage over a lengthy period. This is, in the abstract, what property, contract and tort law do. So, the theory goes, the basic building blocks of a legal system are essential to investment, and thus to growth.

How do we reconcile this with the insights of the norms literature? It is worth noting that the norms literature is predominantly theoretical. It has included some deservedly well-known field studies, such as Robert Ellickson's study of cattle ranchers and farmers in Shasta County, California and Lisa...
settled at the end of the fair. It is common to view the law merchant as noteworthy principally for the lack of governmental involvement. It represents a large-scale spontaneous order. But for present purposes, the critical observation is that the contracting system did not rely solely on social norms. Instead, it included formal rules and enforcement mechanisms that are readily comprehensible to modern lawyers. We can simultaneously appreciate the fact that the law merchant was created by the merchants themselves rather than by monarchs and the fact that they recognized the possibility that reputational sanctions could be insufficient, and accordingly incorporated seizure of goods and other forms of force in order to assure compliance.

GOETZ AND SCOTT’S CONTRIBUTION TO LAW AND MACROECONOMICS

An early article in the Goetz/Scott oeuvre, Enforcing Promises: An Examination of the Basis of Contract, asked, as I have done above, why governments enforce contracts. To be sure, the motivating puzzle was firmly in the law and microeconomics tradition—the goal was to understand the consideration doctrine. But the answer opened a window into the analysis of law’s effects on the larger economy.

Unlike earlier theories of contract, which tended to focus on the effects of legal remedies on the victim of a breach, the economic approach focuses on the effects on the breaching party. Goetz and Scott’s contribution was to recognize that legal enforceability improves the “quality” of a promise, if quality is in part a function of the probability that the promise will be kept. Enabling a promisor to offer two varieties of promises—those enforceable only through informal sanctions and those enforceable through legal sanctions—allows the promisor to charge a higher price amount for the latter type of promise, just as any merchant may offer a cheap, low-quality version and an expensive, high-quality version of a product.

Thus, legal enforceability is instrumentally useful to the promisor because it increases the price he can obtain for his promise. That, in turn, suggests that legal enforcement is only of
WHERE DO WE GO FROM HERE?

Are we at the end of history where contract law is concerned? Once we have noted that a system enforcing voluntary agreements is essential to the smooth functioning of the economic system, is there anything left to do? I have expressed doubt that law and microeconomics is capable of providing determinate answers to detailed questions about contract doctrine. But perhaps law and macroeconomics is plagued by an even more substantial flaw—it provides an unambiguous answer to an important question, but that question is too broad and abstract to provide a useful starting point for future scholarship.

It is true that the big issue relating contract law and the operation of the economy is the basic one of enforcing voluntary agreements. But there is much work to do in making this critical idea operative. Legal scholars, I believe, have to undertake for contract law the analysis that Hernando de Soto has recently done for property law.20 First, they must explain how, against rather long odds, a small number of legal systems made a transition from enforcement based on ethnic or community ties to one based on courts, sheriffs, and above all expectations that the system will function in reality and not just on paper. Second, they should help provide a blueprint for repeating that process outside those lucky few systems.

These are not easy questions to answer. Adequate proof of that proposition lies in the fact that the system of contract enforcement we take for granted exists in roughly 25 developed countries, and nowhere else. In other systems formal contract law remains too costly and arbitrary to be useful to the bulk of the citizenry. Their contract law remains a law of ethnic or community norms.

Legal academics, because of their appreciation for the institutional structure of law creation and enforcement, should be significant participants in this process. So far economists have dominated the study of how institutional and doctrinal differences among legal systems affect the citizen's ability to own, contract, and invest. The consequence is that highly sophisticated methodological tools are being brought to bear on flawed raw material. Legal scholars can and should take the initiative in identifying and explaining the key doctrinal and institution-
al features of contract law in an explicitly comparative framework. They can then help to determine how contract law can be made to work better in the many places it fails.

Footnotes

5 The idea appears in David Ricardo, On the Principles of Political Economy and Taxation (1817).
7 This “just so” quality of economic analyses is artfully parodied in Arthur Leff’s hypothetical concerning a widow thrown out on the street by a coldhearted landlord. See Arthur A. Leff, Some Realism About Nominalism, 60 Va. L. Rev. 451-60 (1974).
15 See Francis Fukuyama, Differing Disciplinary Perspectives on the Origin of Trust, 81 B.U. L. Rev. 479, 480 (2001) (“there is still no consensus even on a definition” of social capital).
Rethinking the Default Rule Project

I. INTRODUCTION

Charlie Goetz and I bear a large responsibility for the formalization in the law and economic of contracts of what has come to be called “the default rule paradigm.” I say that with a mixture of pride and chagrin. But modesty first demands that I acknowledge that the idea itself, as so many ideas that are conventionally credited to academics, has a long lineage in the common law. In *Globe v. Landis*, Justice Holmes, speaking for the Supreme Court of the United States, expressed the idea this way:

> Since people when contracting contemplate performance, not breach, they commonly say little or nothing as to what shall happen in the latter event, and thus the common rules have been worked out by common sense, which has established what the parties probably would have said if they had spoken about the matter (emphasis added).

But notwithstanding the fact that I cannot claim pride of authorship, this idea has had a fundamental and transforming effect on the course of contract law scholarship over the past twenty-five years. As an organizing principle, the notion that contract rules are defaults inevitably leads to the conclusion that all contracts are inevitably incomplete. A complete contract would condition performance on every possible future state of the world or every possible type of contract partner. There are an infinite number of future states, however, and often a large number of possible partner types. Since contracting costs are finite while states of the world (and possibly partners) are infinite, all contracts contain gaps. Contract law rules are intended to fill the gaps; each rule becomes a default term in the contracts that the rule regulates. Contract law default rules thus are public goods.2

Two related implications follow from this analysis. First, in large economies some sets of parties will dislike particular default terms. A default rule typically is justified as doing for parties what they would have done for themselves had the parties’ cost/benefit calculus gone the other way. So, it follows that when the cost of creating their own term to govern a particular situation is less than the gain to them, the parties should be permitted to supplant the state supplied rule.

The second implication of the public goods justification for contract law relates to the grounds on which the state should choose the rules to enact. If parties are free to supplant or modify the state supplied terms, it follows that the law maker should attempt to maximize the size of the set of parties that will find any statutory term acceptable. Put another way, the law maker should minimize the parties’ contracting costs. From this point of view, it would be wrong of the law maker to enact a term that a large number of parties will dislike, because then the parties would have to expend resources drafting their own term.4 The decision maker creating default rules thus should ask what parties would like, not what parties would want.

Scholars have also identified a set of default rules that are termed “information forcing” because these rules create incentives for parties to disclose relevant information to their contract partners.5 For example, the rule of *Hadley v. Baxendale*, providing that a party cannot recover damages for breach unless those damages were foreseeable to the other party is information forcing: it creates an incentive for the party fearing breach to disclose the
extent of the damages it would suffer to the other party. Information-forcing default rules come within this analysis as well as the more traditional “majoritarian” defaults, because parties can create such rules on their own. Thus, the state is, in effect, replicating what the parties would want when it creates incentives for parties to disclose relevant information to their contracting partners.6

II. THE BARRIERS TO THE CREATION OF EFFICIENT CONTRACT TERMS

The claim that the bulk of contract law is (and should be) comprised of these default rules (both majoritarian and information-forcing) has been the principal organizing paradigm in contract law scholarship for the last two decades. But the paradigm has come under criticism in recent years. This criticism takes two very different forms. The first critique challenges the underlying norm of welfare maximization, even in commercial contexts. Eric Posner has argued that the assumption that rational economic actors seek to maximize welfare in contractual relationships is undermined by the failure of business firms to write the efficient complex contracts predicted by economic theory.7 The contract theory literature shows that, when transactions costs are relatively low, parties can write efficient contracts.8 But, Posner points out, neither of these types of contracts are observed in the real world. What we see instead are relatively simple contracts conditioned on a small number of contingencies.9

In Posner’s view, bounded rationality is the reason why parties do not write either complete contingent contracts or “mechanism” contracts. Even business firms, he claims, are incapable of the kinds of complex inductions necessary to write welfare maximizing contracts. Since we currently have no accepted model of bounded rationality, there is no criterion that courts can use to mimic the welfare maximizing outcomes that parties are assumed to prefer. In short, Posner maintains, the law and economics of contract law founders on one of two premises: If the concept of “transactions costs” is limited to the costs of writing and enforcing contracts, then one would expect to see at least some of the efficient complex contracts that economic theory predicts. But if “transactions costs” include cognitive limitations, then parties would not only be disabled from writing complex contracts, but they could not be expected to anticipate the effect of legal rules on the simple contracts they design (and thus the justification for state-created default rules collapses).

Unlike Posner’s challenge to the default rule paradigm, Alan Schwartz and I have in recent years advanced a criticism of the default rule project that proceeds from the assumption that contracting parties are economically rational actors.9 Our criticism follows from two concerns. First, state rule creation itself may seldom be cost justified. The project of providing default rules for parties who have not created their own terms thus founders over the fact that the costs of creating complex rules for modern, heterogeneous economies exceed the social gains, and the fact that simple rules, which may be cost-effective, seldom can solve complex commercial problems. Second, state rule creation is not even possible where there is asymmetric information. Defaults must condition on information that the enforcing authority is able to observe. A default rule that conditions on unverifiable information would create moral hazard. Consequently, parties will routinely contract out of these possible defaults.

These criticisms call into question the continued viability of the default rule project. In particular they suggest the need for reconceptualizing the hypothetical bargain heuristic which holds that the state should fill gaps in contracts by creating terms that the parties themselves plausibly would have agreed to had they bargained ex ante. If that paradigm leads courts to create defaults that are, in fact, poor fits for contracting parties, then the heuristic is fatally flawed.

Here, then, is the puzzle that the law must address: Economically complete contracts are optimal, yet incomplete contracts are the norm. Why is that so? One possibility is bounded rationality, as Posner suggests. But Posner’s argument derives from a misunderstanding of the conditions necessary for parties to write efficient contracts. Often at least some payoff relevant information, such as a party’s valuation, is unverifiable. If such problems of hidden information are ubiquitous, then even perfectly rational economic actors would not write complete contingent contracts that conditioned on events that were either unob-
servable to one of the parties or cannot be verified to courts.

To be sure, the economic theory of contracts predicts that parties also will write complex “mechanism” contracts when the costs of creating the contract are low but verification costs are high. These contracts would induce parties to reveal the ex post state truthfully to a court or other decisionmaker if the contracts were enforceable. As an example, a contract can contain a high price if the buyer turns out to face high demand and a low price if the buyer turns out to face low demand, provided that the parties can observe demand but cannot verify it. The mechanism aspect would require the seller and the buyer to report the state of demand to the court. If the parties’ reports are identical, the court will enforce the transfers (of goods and money) that the contract required for that demand state. If the reports differ, the mechanism directs the court to prevent trade altogether. It is a dominant strategy under such a mechanism for each party to report the ex post state truthfully.11 But, in order for such parties to write an efficient “coordinated message” contract, the courts must be willing to specifically enforce the terms of the contract, including the willingness to enforce the “no trade” term if the price specified by the seller in the message she sends is higher than the value of the goods to the buyer in the message he sends to the court. In short, the contracts predicted by economic theory require a legal regime that simply does not exist. Thus, it is unsurprising that parties in the real world do not write contracts that depend on the courts doing what they have historically been unwilling to do.12

If commercial parties are rational actors, contrary to Posner’s assumption, what does that imply about the optimal set of default rules for contract law? Any rule maker, whether a statutory drafter or court adjudicating a disputed contract, also lacks an infinite set of resources, and so faces many of the constraints that private parties face. This fact makes relevant a distinction between the (relatively small) set of default rules that have evolved at common law and the many more default terms (rules and standards) that have been proposed in Article 2 of the Uniform Commercial Code and the Restatement (Second) of Contracts.

Consider the difference between two possible contractual gaps.13 In the first, a fire destroys the seller’s plant prior to its relation-specific investment. In the second example, the parties agree to subsequently agree upon a price in a volatile market, but fail to do so. In the fire example, there were only two relevant future states: A fire could occur or not. In the price uncertainty example, there were a very large number of possible future states, many of which were likely. A legal rule maker with limited resources can attack problems such as the risk of a fire because they often can be solved with a simple rule: The seller is (or is not) excused when the goods are destroyed without fault while in her possession. The rule maker, however, could not create optimal contracts to solve price volatility problems because it would be too costly to regulate all of the states that could arise in all of the existing markets. Instead of creating a rule, therefore, law makers create a standard: “The price is a reasonable price at the time of delivery.” Thus, contract law typically provides broad standards when the conditions for rules are not met.14 And, in fact, standards are common because the conditions for creating efficient defaults are very difficult to meet. Unsurprisingly, therefore, the Restatement of Contracts and Article 2 of the UCC contain numerous standards and are replete with provisions that require parties to behave “reasonably,” in “good faith,” “fairly” and the like.

Unfortunately, standards seldom are good fits. In the first place they create moral hazard. This is because a decision maker specifies the content of a rule in advance, but can only specify the content of a standard ex post. In short, standards are vague while commercial parties commonly need precision. Commercial parties need to know the nature of their obligations ex ante in order to determine whether to contract at all, and, if so, what kind of contract (simple or complex) to write. For example, a seller who contracts to produce a specialized product for a buyer that requires a relation-specific investment wants to know what product she is required to produce; a law that requires her to make a product that “is fit the ordinary purpose for which it is to be used”, or “fit for the buyer’s particular purpose” is unhelpful. As a consequence, the practice everywhere is for parties to disclaim the quality standards in the UCC in favor of writing contracts that specify the seller’s quality obligation precisely.15 This is a typical response to contract law standards.

Even where the resource costs to the state are low, there are fur-
ther reasons to question whether the state can create efficient default rules to supplement the relatively small number of simple, binary rules that have evolved through the common law process. As I suggested earlier, default terms are inefficient to the extent that they specify terms that condition on unobservable or unverifiable information. The state is simply incapable of completing contracts with useful default terms whenever contracts are incomplete owing to the problems of coping with hidden information.16

This implies that many (if not most) defaults are inefficient. To be sure, the parties can, in theory, reject the state rules and select their own alternatives. But even if opting out is relatively easy, the rules function as a “tax” on private contracting. Moreover, several factors can combine to raise the barriers to opting out. First, the process of incorporating useful defaults often leads to misinterpretation of the express terms of the contract.17 For example, courts often fill gaps by incorporating context evidence to show that apparently determinate terms in a contract are subject to “reasonable variations” or are only “estimates.”18 At best, official “recognition” of these default understandings may assist future parties in better designing their contractual relationship. But the act of incorporating these defaults as an aid to interpretation of the litigated contract will also have the effect of conditioning the explicit price and quantity terms in the contract, terms that otherwise appeared fixed and determinate on their face.

III. TOWARD A NEW DEFAULT RULE PARADIGM

A relatively small but not insignificant change in the default rule heuristic can better address the question of when and under what circumstances the state can efficiently supply default terms for contracting parties. Rather than framing the default rule project as replicating the terms that most parties would probably have chosen had they bargained in advance, I propose to re-frame the question: The project of the law should be to replicate those terms (and only those terms) that individual parties would choose not to bargain over if they knew that the state would provide them.

The purpose of this reformulation is to recognize explicitly that default terms are efficient precisely and only because they do for the parties what the parties cannot as easily do for themselves. With this limitation, we can specify the efficiency conditions for both default rules and default standards. A good default rule19 is one that applies in very few possible future states of the world, is relatively simple in form, is efficient in a highly heterogenous set of circumstances, and does not rely on information that courts cannot conveniently recover. Default standards, on the other hand, permit parties much latitude (i.e., the seller must deliver in a “reasonable” time). Therefore, a good default standard will confer discretion only when a party’s likely actions will maximize joint rather than individual gains.20

Notice that neither efficient default rules nor efficient default standards are hard to write. Let’s take two common examples. Assume that a contractor agrees to construct a multi-storey building on a site owned and selected by the owner. Owing to soft soil conditions, not discovered until the contractor began excavating for the foundation, the building collapses at three stories. After several attempts, the contractor abandons the project. The owner can recover expectation damages for breach of contract. The rule articulated in Stees v. Leonard is that the risks associated with performance of an obligation assumed by contract are assigned by default to the party whose performance under the contract is thereby affected.21 This rule, sometimes known as the “performer’s risk principle,” has obvious efficiency properties, in the absence of any additional facts. The rule is justified by the assumption that, in general, the promisor, as the party in control of the terms of its performance, will have a comparative advantage over the promisee in ascertaining and reducing the risks associated with her own performance and optimally insuring against irreducible risks. As between the parties, therefore, the promisor, in general, is the better risk bearer.

If the parties could easily draft such a broadly applicable rule, what purpose does it serve for the state to provide it initially by default? There are several possible justifications that deserve further scholarly attention. One possibility is that efficient default rules such as this (or defaults such as perfect tender and expectation damages) serve primarily a coordination function. They economize on contracting costs by providing focal points that
align the parties' expectations and thus permit them to solve a coordination problem more efficiently. Parties who write contracts are involved in a mixed motive game. They coordinate on certain expectations but have conflicting interests on others. One way they align their expectations is through communication. When the parties can communicate, experiments show that their "cheap talk" facilitates coordination.22 But, as Thomas Schelling recognized, when the problem is selecting one means of coordinating among many, focal point solutions stand out and attract the attention of both parties.23 The state's comparative advantage is the ability to create salience by publicizing the default rule. Once announced, these focal point defaults economize on costly precontractual communications. The Stees rule focuses the parties attention on the identification and disclosure of the key information that will allow the parties to tailor, to some extent, the generality of the default to suit their particular circumstances.24

A second approach is to focus on the information-forcing aspects of so-called majoritarian defaults. Compare, for example, the common law approach to default rule formulation with the more modern approach of filling gaps with vague default standards. Under the common law, courts were prepared to declare contracts void for indefiniteness if the parties failed to specify the outcome in realized states of the world. The indefiniteness rule might be understood as a kind of global information-forcing default, one that uses the threat of non-enforceability to encourage parties to specify the solution to certain contingencies themselves. Viewed from this lens, the question, then, is whether the contemporary approach—salvaging incomplete contracts by filling gaps with vague standards—more efficiently forces parties to reveal hidden information to their contracting partners.

In short, contract defaults are either information forcing or information enhancing. A useful example of the possible efficiency properties of some default standards is the "best efforts" obligation that is implied in exclusive dealings contracts. A "best efforts" coordination point focuses the parties' negotiations on the need to structure the contract so as to motivate the party with discretion to exert those efforts that maximize the joint surplus. The vagueness of the best efforts clause also motivates the party who is financing the best efforts investment to reveal its valuation in order reach agreement on a price term that motivates the investing party to take both interests equally into account. This commonly requires the parties to agree on a range of contractual terms (i.e., revenue sharing or benchmarking) to more closely align the parties' incentives such that the party with discretion will, within a tolerable range, act to maximize the joint product.

IV. CONCLUSION

If efficient default rules are simple and binary and are easy to write, the comparative advantage of the state cannot be explained as simply a reduction in the transaction costs of negotiating and writing contract terms. But the state does have an advantage, the capacity to create salience. The common law courts had an intuition that a number of these salient solutions could be identified. The problem is that, by not appreciating the true function of contract defaults, we have stimulated a cottage industry in which courts and legislators have sought to do that which the parties themselves could do and do better or would never have chosen to do at all. It is time to limit the default rule project to those tasks that individual parties could not do as well by themselves. A paradigm that understands the state's role as creating only the terms that meet those stringent conditions reminds us of the limited role of the state in contract drafting and interpretation (and parenthetically, focuses our attention on the critically important role of the state in contract enforcement).
FOOTNOTES

1 In a series of articles written over the space of a decade in the 1970s and 80s, Goetz and I worked toward an optimal formulation of the default rule approach. In one of our earliest statements of this conceptual approach, we proposed the basis for what has become known as “majoritarian” default rules: Facing positive transactions costs, however, the legal system provides ready-made rules based on common assumptions about typical contracting behavior. These “off-the-rack” contract rules reduce the costs of exchange by specifying the legal consequences of typical bargains where the expected cost of explicit negotiation exceeds the utility derived from individualized exchange. It is only where idiosyncratic value exceeds negotiating costs, therefore, that contractual flexibility induces privately conceived alternative arrangements. Charles J. Goetz & Robert E. Scott, Liquidated Damages, Penalties and the Just Compensation Principle, 77 Colum. L. Rev. 554, 588 n. 87 (1977).


3 In theory, the public goods justification for contract law argues for the state to create standardized contract terms for various populations of contracting parties so as to reduce the errors that inhere in incomplete contracting. Standardized terms and understandings that are recognized and publicized by the state bring a collective wisdom and experience that parties are unable to generate individually. This process would be innocent if the set of fair rules and the set of efficient (or party preferred) rules perfectly overlapped, but, as we have argued above, in practice these sets are partly disjoint. Then choosing a default rule on the basis of some normative conception of fairness would be wrong, in the sense that it would not increase the amount of fair contracts in the world, but it would increase the amount of contracting costs in the world, as parties contracted out of the codes. If more than one possible default rule would be efficient (technically, the set of feasible rules on the “pareto frontier” has more than one member), then a decisionmaker could choose among these rules on some fairness criterion. Cases in which there are a number of fair and efficient rules for governing particular cases apparently have not been identified, however.

4 And while this may seem obvious, commentators and law makers often argue for or enact contract law rules on the ground that these rules are fair. A focus on fairness would be innocuous if the set of fair rules and the set of efficient (or party preferred) rules perfectly overlapped, but, as we have argued above, in practice these sets are partly disjoint. Then choosing a default rule on the basis of some normative conception of fairness would be wrong, in the sense that it would not increase the amount of fair contracts in the world, but it would increase the amount of contracting costs in the world, as parties contracted out of the codes. If more than one possible default rule would be efficient (technically, the set of feasible rules on the “pareto frontier” has more than one member), then a decisionmaker could choose among these rules on some fairness criterion. Cases in which there are a number of fair and efficient rules for governing particular cases apparently have not been identified, however.


6 For example, a seller can propose a contract that disclaims liability for consequential damages. Her contract partner then can remain silent and sign the contract or propose a clause that would compensate him for elements of these damages. The sample contract serves an information-forcing function because it creates an incentive for the informed party to offer an amendment to the contract, and thereby to disclose his possible damages.


8 Transactions costs are formally assumed to be zero in the economic models, but the claim holds whenever writing contracts is relatively cheap for the parties.

9 These contracts may take one of two forms. When the costs of writing contracts are relatively low and it is also (relatively) cheap to verify relevant actions and later states of the world, parties can write a complete state-contingent contract, prescrib ing the optimal action for each of them to take in every possible future state. When it is relatively cheap to contract, but costly to verify future actions and states, parties can write contracts that induce parties to send “messages” whose content is a function of information that is observable ex post. If courts specifically enforce the content of these messages, this contract form can replicate the outcome of any ex post renegotiation; hence, it specifies efficient outcomes in equilibrium. The economic view thus implicitly presupposes that parties will write the contract that best implements their intentions when contracting costs are low.


11 As an illustration, let the ex post demand be high. The seller would report the state truthfully because she gets the high price. The buyer, knowing this, also knows that if he reports the state is low, he will not pay the low price; rather, the court will prevent trade. The buyer’s gain then would be zero. Since the contract ensured the buyer a positive gain in the high demand state, else he would not have signed, the buyer also would report that the state is high. The difficulty is that courts in most legal systems seldom would enforce no-trade clauses.

12 There is a second possible reason for incompleteness. Consider an example of the optimal multi-price contract. Parties may face an infinite set of future states, but parties never have an infinite set of resources with which to contract. This scarcity implies that parties cannot write terms for every possible contingency. Parties in simplified examples thus could write optimal multi-price contracts for contingent states with only a handful of values, but real-world parties seldom would find it cost justified to write such contracts where there are hundreds of possible prices. Parties draft for the contingencies that are likely to arise. As a consequence, contracts always are
incomplete; every contract is a potential subject for litigation. Parties to long term contracts often create pricing formulas that attempt to make their contracts close to fully state contingent in every period. These formulas can deviate widely from the outcomes that a fully state contingent contract would direct when dramatic but low probability events suddenly materialize, such as a recession or war. In these cases, parties sometimes attempt to argue in litigation that they should be excused from performance on the ground that performance had become impracticable. See §2-615 and Part III infra.

13 This example is drawn from Schwartz & Scott, The Limits of Contract Law, supra note 10.

14 Thus, when the question is whether the seller has properly complied with its default obligation to supply goods of a certain quality, the UCC provides that the product must be “fit for the ordinary purposes for which it is to be used” or “fit for the buyer’s particular purpose” if the seller has “reason to know” that purpose. UCC §§ 2-314 & 2-315. As the tax laws illustrate, rules can be complex. The requirement of simplicity for a good contract law default follows from the fact that contract law rules often are created by courts, who lack expertise and staffs, or by private law reform groups (for recommendation to courts or legislatures), and who suffer from the same deficiencies, though to a lesser degree than the courts. Complex rules commonly are written by administrative agencies.


17 Courts typically interpret the meaning of express terms in an agreement by looking to precisely the same commercial and legal context they use to identify and incorporate default terms. Unfortunately, by giving custom and usages of trade interpretive priority over the express terms in the contract, courts may unwittingly misinterpret the meaning of the express terms the parties have used. Thus, if the law treats the words used to opt out of an otherwise applicable custom or usage as themselves highly elastic and context-relative, attempts to escape those default understandings become problematic. See Robert E. Scott & Douglas L. Leslie, Contract Law and Theory (2ed. 1993) at 534-35. See also, Goetz & Scott, The Limits of Expanded Choice, supra note— at 283-286.

18 See, e.g., Columbia Nitrogen Corp. v. Royce Co., 451 F.2d 3 (4th Cir. 1972) (course of dealing and usage of trade admitted into evidence to show that express price and quantity terms in written contract were only fair estimates); Modine Mfg. Co. v. North E. Indep. School Dist., 503 S.W.2d 833, 837-38 (Tex. Civ. App. 1973) (trade usage admitted into evidence to show that express terms should be interpreted as permitting reasonable variations).

19 The decisionmaker specifies the content of a rule in advance. Thus, drivers cannot exceed a 55-mile-per-hour speed limit. The decisionmaker specifies the content of a standard ex post. Thus, parties must drive “reasonably” in the circumstances.


21 Stees v. Leonard, 20 Minn. 449 (Minn. 1874).


24 The default rules may also have a distributional effect on each party’s share of the contractual surplus. See Russell Korobkin, A Positive Theory of Legal Negotiations, 88Geo. L. J. 1789 (2000).
Determining of damages after breach. Functionally, Goetz and Scott’s scheme is similar to the limited judicial regulation of liquidated damages in force in some civil law systems.2

Disagreements over the treatment of liquidated damages clauses center on three variables: the accurate measurement of the nonbreaching party’s damages, the cost of contracting parties renegotiating contract terms after breach, and litigation costs associated with enforcing liquidated damages clauses under the common law rule. Goetz and Scott and traditional justifications differ in their estimates of the variables. In general, Goetz and Scott are pessimistic about judicial error and litigation costs: for them, both are high. At the same time, they are optimistic about renegotiation costs, finding post-breach bargaining costs of term adjustment to be low. Traditional justifications make the opposite assessment. They are optimistic about courts’ ability to accurately measure damages and yet the reasonableness of stipulated damages in the universe of litigated cases. Worrying about the in terrorem effect of damages sum in excess of loss to the non-breacher, they are pessimistic, implicitly judging post-breach renegotiation costs to be high. The different assessments are based on implicit empirical judgments about the likely values of the variables.

Liquidated Damages was published in 1977, in the early stages of psychological and economic research on choice, logical reasoning and probabilistic judgment. Although Tversky and Kahneman’s Judgment Under Uncertainty: Heuristics and Biases appeared in 1974, summarizing their experimental evidence of systemic errors in probabilistic judgments and inferences, Kahneman and Tversky’s Prospect Theory: An Analysis of Decision Under Risk was published in 1979, after Liquidated Damages. Much of the experimental economic literature on rational choice appeared in the 1980s and 1990s.1 Behavioral law and economics (“BLE”) is a legal literature published within the last decade that focuses on the research. The literature draws implications for the design of legal rules, including the treatment of liquidated damages, from the research. Most of it argues that relevant experimental studies tends to support judicial intervention in contractual ordering, including the current law of liquidated damages. Because Goetz and Scotts’ proposed rule restricts the judicial regulation of stipu-
ulated damages clauses, this essay reassesses *Liquidated Damages* in light of BLE.

This essay argues that both Goetz and Scotts’ proposed rule and its justification are unaffected by experimental results adduced by BLE. Part I is introductory and describes the basic case for limited penalty regulation presented in *Liquidated Damages*. Part II argues, against most commentators, that relevant research results do not support the current law of judicial penalty regulation. It concludes that commentators draw the wrong legal implications for the design of rules regulating liquidated damages. Part III argues that the research findings usually adduced have nothing to say against *Liquidated Damages*’ case for limited penalty regulation. Throughout I assess the policy implications BLE draws from relevant research results, not the research itself or its interpretation.

I. LIQUIDATED DAMAGES AND JUDICIAL MEASUREMENT ERROR

*Liquidated Damages*’ case for limited penalty regulation of liquidated damages is based on errors in judicial measurement of damages. It assumes that courts over a wide range of cases make significant errors in gauging the value of contractual performance to the nonbreaching party. Simplified, the case goes as follows. As with any contract term, contracting parties have an incentive to select an efficient term to measure damages. This is because, holding other terms constant, an efficient damage measure maximizes joint gains from contracting. If courts accurately measured ex post damages from breach, contracting parties would not select a term stipulating damages. The term would be yield no benefits and, if costly to supply, therefore would not be cost-justified. However, judicial errors in measurement of damages increase the contract price. This is because contract price reflects damages payable in the event of breach, and judicial error in determining damages increases the cost of breach to the nonperforming party. If the contracting parties on average can accurately estimate damages upon breach, potentially they can reduce the contract price by stipulating damages. A term stipulating damages reduces contract price when the negotiation costs of doing so are less than the sum of proof and error costs associated with relying on a court to measure damages. Thus, liquidated damages clauses when used increase the joint gains from contracting. This supports rules which treat such clauses as presumptively enforceable.

Central to the argument are two obvious assumptions: that courts incorrectly measure damages in a wide range of cases, and that contracting parties on average can correctly estimate damages ex ante. Without the former assumption, Goetz and Scotts’ case does not justify a rule presumptively enforcing liquidated damages clauses and therefore limited penalty regulation. For instance, if courts erred only in a limited range of cases, the presumption of enforcement would be correspondingly weakened. At most the presumption would apply in restricted ranges of cases. Without the latter assumption, the benefit of stipulating damages is theoretically indeterminate. It depends on the degree of the parties’ average inaccuracy in estimating damages. If parties’ estimates are only slightly more accurate than courts’ ex post measurements of damages, then liquidated damages clauses only reduce error costs by a modest amount. Given the costs of negotiating and writing such clauses, their use reduces the contract price in few instances. If parties’ estimates are less accurate than judicial assessments, liquidated damages clauses will not reduce error costs. The justification for their enforcement in these circumstances depends on the size of litigation costs incurred when a court sets damages. The theoretical indeterminacy in result therefore undermines the presumption in favor of enforcement of stipulated damages measures.

Other elements of *Liquidated Damages*’ presentation are inessential to Goetz and Scott’s case. They do not affect the justification of a rule recommending limited judicial penalty regulation. In particular, assumptions about idiosyncratic value placed on performance, or the insurance or incentive functions of liquidated damages clauses are unnecessary. Although all are part of Goetz and Scott’s “efficient insurer model,” the case for limited judicial penalty regulation does not depend on these assumptions. Significant judicial error in damage measurements is sufficient to justify routine enforcement of liquidated damages clauses.
A promisee might assign only an objective market value to the promisor's performance. Still, objective market value can be difficult to verify. This is because the relevant markets are not self-defining and the relevant attributes of performance can be difficult for a third party to observe with confidence ex post. If so, the risk of judicial error in using price in a particular market to calculate damages can be significant. For example, when is a substitute purchase a cover transaction? When is the time within which cover is effected reasonable? Thus, judicial error does not depend on the presence of idiosyncratic value placed by the promisee on the promisor's performance. This is consistent with the frequent use of liquidated damages clauses in international construction or equipment contracts, where idiosyncratic value probably is not present but relevant markets still hard to identify reliably. Goetz and Scott's "Case of the Anxious Alumnus," which relies on idiosyncratic value, merely illustrates the possibility of judicial errors in damage measurements.\(^1\) Such error illustrated is not limited to errors in the measurement of idiosyncratic value.

The insurance function of liquidated damages clauses also is inessential to the case for limited penalty regulation. A risk-averse promisee and risk-neutral or risk-preferring promisor might agree to shift the promisee's loss from breach to the promisor. A premium paid by the promisee also can include loss that is difficult to prove ex post, so that insured loss (wrongly) appears to be overcompensatory coverage and function as a penalty. Again, Goetz and Scott illustrate the point with the Case of Anxious Alumnus in which the promisee insures against nonpecuniary loss (loss resulting from idiosyncratic value). Rea and others have responded by noting that promisees usually will not insure against nonpecuniary losses: the marginal utility of money tends to be lower for people who have suffered nonpecuniary losses than prior to such loss.\(^6\) Insuring against nonpecuniary loss therefore usually reduces total utility across time and states of wealth. So insureds typically will purchase insurance covering only pecuniary loss. For two reasons, the response, even if correct, does not affect Goetz and Scott's case. First, their case for limited penalty regulation applies to all parties, not just to parties with particular attitudes toward risk. The criticism therefore at best tells only against the enforcement of liquidated damages clauses in contracts involving risk-averse promisees. It does not touch Goetz and Scott's rationale for enforcement in other cases—where risk-neutral commercial parties are involved, for instance. Second, and more important, the shape of typical persons' utility functions is one thing; the ability to accurately measure loss is another. Nonpecuniary losses are difficult to verify; hence the possibility of judicial errors in damage measurements involving them. But, again, measurement errors can occur with pecuniary loss as well. Parties can prefer to reduce judicial error costs in measuring damages with respect to these losses by supplying liquidated damages clauses.

The incentive function of liquidated damages clauses is unnecessary to Goetz and Scott's case too. True, such clauses induce the promisor to take cost-justified precautions against breach. Goetz and Scott's efficient insurer model assumes that promisors can reduce the probability of breach by taking precautions. The model takes promisors to have a technological advantage at doing so as against other third parties.\(^7\) By agreeing to bear the risk of the promisee's loss in idiosyncratic value from breach through a liquidated damages clause, the promisor bears the full costs of its breach decision. It therefore has an incentive to take an optimal level of precautions against breach. But the identified effect on incentives is superfluous to Goetz and Scott's case. Judicial error in measuring damages can be enough to induce contracting parties to use liquidated damages clauses. As long as judicial measurement errors are costly to them and a liquidated damages clause is a cost-justified way of reducing these error costs, the parties prefer the clause to standard damages measures. This is true even if the promisor cannot affect the probability of breach. The informational advantages the promisor has over third parties in gauging the promisee's value from performance allows it to offer lower-priced damages terms than are offered by third parties.

II. BLE AND PENALTY REGULATION

BLE could use findings about how people choose in at least two different ways: as a part of a theory of rational choice or to design or evaluate legal rules. Behavioral economists produce experi-
A. THREE TYPES OF INFERENCE

Defensible inferences from research findings about choice behavior in experimental settings can support a proposed rule. An inference extrapolates results holding in restricted choice environments to unconfirmed predictions in different environments. It predicts how people subject to a proposed rule will respond from the way in which experimental subjects make choices in controlled situations. The inference is a substitute for research findings that are robust across a wide range of environments. Without identifying them, the BLE literature uses three different types of inferences from experimental results: (1) an inference to context-sensitivity; (2) a modest inference to limited application; and (3) strong inference to general application. The inferences differ in the extent to which they generalize from the results to choice behavior in nonexperimental environments.

1. An inference to context-sensitivity. BLE relies on studies that show experimental subjects systematically make choices and probabilistic judgments that violate standard axioms of rational choice theory. Subjects apparently make different choices in response to differently formulated but equivalent descriptions of options (“framing effects”). The procedure by which choices are elicited can alter subjects’ preferences among options (“preference reversals”). Preferences among pairs of options also can differ as new options are added (“context-dependence”). Subjects can be more averse to losses relative to an initial level of assets than they are attracted to gains from the same level (“loss aversion”). In these studies the context in which options are selected apparently matters: formulation of options, the procedure for eliciting them, the set of options from which a choice is made, and levels of assets held by the decisionmaker. Because context can affect choice, the weakest inference from the studies is that in some nonexperimental settings the same might be true. Context in other settings might matter too. The (uncontroversial) inference supports a correspondingly weak prescription about the design of legal rules: proposed rules should be sensitive to the context of choice. Rules that fail to take into account the effect of context on people’s response risk being bad rules.
2. Modest inference to limited application. Another weak inference from the findings is that the choice behavior exhibited in experimental settings is present in nonexperimental environments sharing similar features. A choice environment is similar to an experimental setting when people’s attributes, incentives, institutional setting, and formulation of options are similar to those in the experimental studies. The inference is modest because its conclusion about choice behavior is limited by conditions of the experimental protocols. Thus, it does not support conclusions about systematic cognitive bias or choice when nonexperimental environments are markedly different. For instance, a person’s sophistication in making choices or the organizational structure in which options are selected can be unlike those in experimental settings. In these instances people’s choices and probabilistic judgments might be consistent with the assumptions of rational choice theory. In fact, some experimental results suggest that organizational setting, formulation of options and incentives are important variables affecting a tendency to violate these assumptions. The point here is not that particular behavioral predictions are confirmed or falsified in nonexperimental settings. It is that, where the settings are dissimilar to laboratory conditions, the modest inference does not itself support any prediction at all.

3. Strong inference to general application. The strong inference is that choice behavior exhibited in experimental protocols is also exhibited in many or most nonexperimental settings. The inference extrapolates from the range of differences among the experimental settings in which violations of rational choice axioms have been induced to conclude that the findings are robust. Replication of the findings while changing monetary incentives or the sophistication of subjects, for instance, is taken to suggest that the choice behavior is not confined to laboratory studies. The precise strength of the inference to nonexperimental settings depends on the robustness of findings. Robustness is not based on a supporting theory of rational choice, because the theory is not cast in a generalizable form. It instead is based on a judgment that laboratory settings are important because representative of many nonexperimental environments. The strong inference to general application judges the settings to be representative. It supports reliance on unconfirmed predictions about most people’s choice behavior in many or most settings.

In the design of legal rules, the different sorts of inference support different sorts of rules. For design purposes, the inference is a substitute for confirmed behavioral predictions within a domain. Roughly, legal rules with broad scope require support by the strong inference when behavioral predictions are unconfirmed across a wide range of different conditions. This is because a basis for believing that a broad rule will produce desirable behavior in a range of circumstances in which the rule applies is needed, and only the strong inference provides the basis. Weaker inferences, such as the modest inference, are insufficient since they only support behavioral predictions in a limited set of circumstances. For instance, the modest inference is insufficient to support an untailored default rule applicable to all transactors because it does not predict how all transactors will respond to the rule in a variety of circumstances. Correspondingly, the modest inference can support rules with more restricted scope. For instance, a rule applicable to a particular set of transactors or transactions only requires supportable generalizations about how these transactors will respond in a restricted range of circumstances. The modest inference can provide this more limited generalization. If consumers are shown to be unable to understand product warnings, for example, the cost of providing effective information about product failure rates to them is high. A rule that leaves the risk of product failures on the manufacturer when the product is sold to consumers might be appropriate, even when the sale is accompanied by a warning. Again, a proposed methodological injunction might urge that in designing rules contextual features of transactors and transactions be taken into account. The inference to context-sensitivity supports the injunction because contextual features affect behavior in some circumstances. Since it makes no behavioral prediction, however, the inference is insufficient to support adoption of any particular default rule.

B. BLE’S INFERENCES AND PENALTY REGULATION
Penalty regulation involves a broad regulatory rule: courts are to vet contractual clauses fixing damages and refuse to enforce them
when they state an unreasonable forecast of actual or estimated damages from breach. The rule is general in scope, applying to all contracting parties and types of contracts. Even if the difficulty of measuring damages or determining the probability of breach ante affects the reasonableness of a damage estimate in particular cases, the rule still applies. The court still must pass on the enforceability of the stipulated damages. Given the broad scope of the rule regulating penalties, enforceability of a damages estimate potentially can be put in issue in every case. Litigation costs induced by penalty regulation, summed over all litigated cases, might not justify the rule. But an absence of systematic cognitive failures within a domain to which a rule applies undermines BLE’s separate justification for the rule. Because BLE’s case for penalty regulation is not backed by confirmed predictions about how people generally select damages estimates, it relies on inferences from laboratory studies. Thus, BLE’s case turns on the sort of defensible inference that can be drawn from them.

None of the defensible inferences from laboratory studies supports a rule of penalty regulation. Since a rule of penalty regulation is a broad rule, it must be supported by the strong inference to general application. Weaker inferences from experimental data cannot back predictions across the wide range of choice environments to which a broad rule applies. The modest inference to limited applications predicts systemic cognitive failures only in restricted circumstances. It therefore at most supports a narrower rule of penalty regulation that applies only to them. The inference to context-sensitivity similarly limits predictions to particular contextual features of the choice environment. Thus, it too cannot support broad rules that apply across the range of contexts, because their application ignores context. Other considerations of rule design might justify a broad rule of penalty regulation, such as administrative economies or formulational difficulties associated with a narrow rule, but the weaker inferences themselves do not justify it. Only the strong inference to general application can support a rule of penalty regulation.

But the strong inference is too strong. For one thing, it is inconsistent with the inference to context-sensitivity. If the laboratory studies support the belief that particular systemic cognitive bias operates in most or all choice environments, the specific setting in which choice occurs does not matter. Setting does not affect behavioral responses. Thus, the strong inference makes context irrelevant to the selection of legal rule. This is inconsistent with the inference for context-sensitivity drawn from laboratory studies that find that choice is sensitive to features of the choice environment, such as framing effects and organizational setting.

The strong inference also is too strong because it predicts systemic cognitive failures in choice environments in which they do not occur. Take the cognitive bias of “ambiguity aversion”: the preference for options with precise probabilities over options with unknown or imprecise probabilities. Stipulated damages fix the limits of recoverable damages, so that contracting parties can forecast their exposure to liability reliably based on precise probabilities. The damages fixed, however, may bear no reliable relation to actual damages. A prediction that contracting parties prefer precise probabilities of damages exposure is sound if most people in most situations exhibit a preference for clarity. But laboratory studies find no aversion to ambiguity when options with unknown or imprecise probabilities are evaluated alone and not with options with precise probabilities. The presence of these alternative options apparently affects the preference for clarity. Thus, laboratory studies do not support the inference that the preference operates in most environments and therefore penalty regulation.

Or consider the overconfidence bias: the apparent underestimation of the probability that one’s judgment is inaccurate. Contracting parties who are overconfident about their skills or optimistic about their future underestimate the risk of their breach or its consequences. Such overconfidence could induce the parties to agree to a measure of damages that pays the non-breacher more than the loss resulting from breach. If most or all contracting parties are overconfident across contracts stipulating damages, the stipulations would unreliably measure actual damages. However, evidence suggests that features of the choice environment can mute or eliminate overconfidence. For instance, changes in the formulation of options or organizational safeguards in place in firms can prevent the bias from operating. As before, the point is not that overconfidence does not operate
among contracting parties. The point is that it is unsafe to infer from laboratory studies that most or all contracting parties display overconfidence in their contracting behavior.

Finally, consider hindsight bias: the tendency to overestimate the probability of an event’s occurrence after it has occurred. Hindsight bias apparently is exhibited across populations and a range of expertise, including among courts, and is hard to eliminate. The robustness of the bias predicts that in regulating stipulated damages measures courts systematically misestimate the ex ante likelihood of particular sorts of damages. Rather than supporting penalty regulation, the strong inference to general application from hindsight bias predicts that courts will regulate stipulated damages measures poorly. Thus, the prediction supports the case against the current law of penalty regulation.

Courts, arguably aware of judicial susceptibility to hindsight bias, have created exceptions to penalty regulation. But the exceptions work by avoiding judicial reliance on ex post judgments of ex ante probabilities of damages. They do not operate by attempting to mute the effect of the bias by increasing the standard of proof of ex ante probabilities or altering burdens of proof. By making judicial assessments of ex ante probabilities irrelevant to the enforcement of stipulated damages measure, the exceptions instead avoid the effect of hindsight bias. For instance, courts usually uphold “take or pay” clauses without submitting them to liquidated damages analysis. They thereby completely avoid inquiring into ex ante probabilities of damages. Thus, an exception avoids the effect of judicial hindsight bias by eliminating penalty regulation when it applies. The persistence of the bias suggests that debiasing techniques are ineffective and that legal rules generally should take a bias-avoidance form. A rule of limited penalty regulation avoids the bias because it restricts the occasions on which a court vets a liquidated damages clause by ex post estimations of ex ante forecasts of damages.

III. LIQUIDATED DAMAGES AFTER BLE

BLE has nothing to say against Goetz and Scotts’ argument for limited penalty regulation. This is because the argument for limited penalty regulation does not rely on findings about cognitive failure or defensible inferences from these findings. It instead is based on the judicial errors in damage measurements resulting from restricted access to information. Because measurement error results from informational limitations, not cognitive failures in processing information, Goetz and Scotts’ justification is independent of the laboratory results BLE relies upon. Courts have access to limited amounts of information about contracting parties’ damages. Informational limitations make elements of damages unverifiable to them across a wide range of contracts. Limited information therefore creates a risk of judicial error in measuring the parties’ damages from breach. Although the risk of measurement error is greatest when the parties assign idiosyncratic value to contract performance, limited information affects damages calculations in other cases too. The amount and quality of information available to courts creates risks of measurement error even when idiosyncratic values are not involved. Even if courts are subject to cognitive failures described by BLE, they still could make measurement errors resulting from informational limitations.

A reliance on limited information about damages makes predictions of cognitive failure irrelevant to Goetz and Scotts’ case. For restricted access to information and cognitive failures in processing information are independent sources of measurement error. If measurement error resulting from restricted informational access justifies limiting the judicial regulation of liquidated damages clauses, the existence and extent of cognitive failure does not affect the justification. Thus, predictions about cognitive failures among courts or contracting parties do not undermine the case for limited penalty regulation. Only variables affecting judicial access to information about damages would do so. At most, uncertainty about the effect of intervening organizational or individual variables on cognitive error, or about the consequences of judicial intervention in contractual ordering, provide a further reason for limiting penalty regulation.

Goetz and Scotts’ proposed rule of limited penalty regulation also is consistent with BLE’s defensible inferences from laboratory results. Their proposed rule has two parts: the requirement that stipulated damage provisions be enforced in all cases, and exceptions allowing nonenforcement when there is evidence of
bargaining defects.22 Because BLE’s strong inference to general application is unsupported, cognitive failures in the range of cases cannot be predicted from such failures in experimental choice environments.23 Even the robustness of hindsight bias predicts systematic error in judicial assessments of ex ante damage estimates. Thus, the strong inference cannot provide a basis for attacking the proposed rule’s general presumption of enforceability of stipulated damage provisions. BLE’s weaker inferences support exceptions to the presumption. Both the modest inference to limited application and an inference to context-sensitivity generalize across a restricted range of choice environments. They therefore predict cognitive failure only in specific sorts of cases resulting from contextual features of these environments.

In these sorts of cases, stipulated damage clauses are not reliably value-maximizing terms. Both inferences therefore can support exceptions to a presumption of general enforceability. Neither supplies predictions that are inconsistent with the presumption contained in Goetz and Scott’s proposed rule.

Goetz and Scott’s proposed rule recognizes exceptions supported by BLE’s defensible inferences from experimental results. The second part of their rule does not enforce a stipulated damages clause when it is the product of bargaining defects. Unlike damage schedules, courts can verify defects in the bargaining process, presumably because such deficiencies are not observable only by the contracting parties. This exception therefore allows the judicial vetting of liquidated damages clauses to determine the presence of defects in the bargaining process. These defects include a systematic inability of some parties to process information needed to price accurately a term stipulating damages. This is a type of cognitive failure. BLE’s modest inference can identify the choice environments in which particular sorts of parties are likely to misestimate price systematically. The inference provides indirect evidence of the presence of bargaining defects resulting from cognitive failure in particular sorts of cases. BLE’s inference to context-sensitivity requires that legal rules be responsive to the features of the choice environment in which misestimation of price occurs. Exceptions to a rule limiting judicial regulation of penalty clauses therefore can be based on the presence of bargaining defects. (For purposes of rule design, the inference to context-sensitivity does not dictate how an exception is to be formulated.) Both inferences support an exception to limited penalty regulation based on bargaining defects resulting from cognitive failure.

CONCLUSION

A standard criticism of BLE is that it lacks a unified theory of rational choice that can support unconfirmed behavioral predictions. For legal design, the charge is not fatal. Needed support for predictions about behavioral responses to legal rules can come indirectly, from defensible inferences from experimental results. However, because the defensible inferences from the results BLE relies on are limited to a restricted range of choice environments, they cannot support a broad legal rule that is to apply in most cases. Two consequences follow for the regulation of liquidated damages clauses. First, the inferences cannot support a rule of penalty regulation. At most, they justify exceptions that allow judicial oversight of liquidated damages clauses in particular circumstances. Because BLE’s defensible inferences have a restricted range, they cannot themselves undermine the general presumption favoring the contracting parties’ choice of value-maximizing terms. Second, the inferences cannot undermine arguments for limiting penalty regulation that do not rely on the processing of information. Arguments from measurement error resulting from restricted access to information about damages, such as Goetz and Scott’s, are unaffected by findings of systemic cognitive failure in information processing.
See Liquidated Damages, supra note 1, at 578-79.


7. See Liquidated Damages, supra note 1, at 580-581.


9. See id. at 1028. For criticism of BLE's insufficient attention to institutional setting, see Daniel A. Farber, Toward a New Legal Realism, 68 U. Chi. L. Rev. 279, 281, 296 (2001).


13. For different judgments, compare the authors cited supra note 11 and Kaushik Basu, Prelude to Political Economy 41 (2000) (guess that violations of weak axiom of revealed preference will be marginal in domain of political economy).


20. Rachlinski seems to draw a different conclusion from the pattern of judicial exceptions to penalty regulation. By urging "improved implementation" of the existing scheme of regulation, he appears to suggest that the exceptions "implement" it. See Rachlinski, supra note 11, at 761. Because the exceptions avoid the operation of hindsight bias by making ex ante estimates irrelevant to the enforcement of a liquidated damages clause, the better conclusion is that the exceptions eliminate penalty regulation. For a comparable elimination of negligence liability of corporate officers by the business judgment rule, see Rachlinski, supra note 19, at 619-620; Hanson & Kysar, supra note 14, 680 n.26.


22. See Liquidated Damages, supra note 1, at 592.


24. See Liquidated Damages, supra note 1, at 593.
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ROBERT E. SCOTT

DAVID AND MARY HARRISON DISTINGUISHED PROFESSOR OF LAW

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