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CONTRACT LAW’S INEFFICIENCY

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INTRODUCTION

Neoclassical economic theory seems to aptly characterize contract law’s essence. Contracts enable two parties to reach a mutually beneficial agreement, thereby facilitating economically efficient transactions.

This article will examine an alternative hypothesis—that contract law is about enforcing some inefficient bargains in order to provide enough security to make people cooperate over fairly long periods of time. On this account, contract law manages change over time, rather than achieves static efficiency.¹

The traditional account explains why parties make contracts, i.e. because they anticipate benefits exceeding the costs of carrying out their bargain.² Yet, the neoclassical account does not explain the law of contracts, which except in narrow circumstances coerces involuntary performance or payment of damages later on, when one party no longer agrees to perform. The breaching party presumably has determined that performance does not provide benefits exceeding that party’s costs. If a mutual agreement indicating an efficient contract continued to exist, probably nobody would need to enforce the contract. The law of contracts exists because often something changes after the parties sign a contract making continued performance inefficient. Hence, contract law is largely

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about enforcing inefficient agreements in order to manage change over time, in other words the economic dynamics involved in carrying out a bargain.\(^3\)

This way of viewing contract law provides fresh insights into the traditional law and economics approach to contract law. The traditional approach involves an effort to establish which contract rules are efficient.\(^4\) It often proceeds as if efficiency were a unitary thing realizable by contractual parties if only the law creates the proper incentives. But the analysis supporting the contrast between efficient contracts and inefficient contract law suggests that efficiency has a temporal dimension and that some inefficiency is inevitable in markets, no matter what legal rules judges establish. What appears efficient at one time may prove inefficient at another. Although the economics literature recognizes that efficiency over a short time frame may not correspond with efficiency over a longer time frame, the law and economics of contract slights this point.\(^5\)

This view of contract law as often enforcing inefficient transactions in order to provide a stable framework for managing change over time leads to a rich set of results. It casts into doubt a major rationale for focusing so much of the study of contract law on efficiency—the idea that inefficient contractual rules prove futile. That is not to say that the debunking of the futility rationale alone settles the debate between those emphasizing efficiency factors in contract law and those focused more on fairness.\(^6\) But it does set the stage for rethinking efficiency’s role.

At the same time, this insight helps explain some of the principle results seen in work reflecting an efficiency-based approach to contract law. It turns out that a number of important claims about the efficiency of laws

\(^3\) Cf. Melvin A Eisenberg, *Why There is no Law of Relational Contracts*, 94 Nw. U. L. Rev. 805, 807 (2000) (claiming that classical contract law was “static” in that it focused on a single instant of time instead of an ongoing relationship).


governing breach of contract depend heavily upon the underlying models’ temporal assumptions. Change those assumptions and you can change the results. My account then adds to existing explanations of indeterminacy in the law and economics of contract.\footnote{Cf. Posner, \textit{supra} note 4, at 853 (finding the indeterminacy to be a result of complex models); Richard Craswell, \textit{Contract Remedies, Renegotiation, and the Theory of Efficient Breach}, 61 S. Cal. L. Rev. 630, 635-36 (1988) (explaining that in the absence of transaction costs any damages rule is efficient, as the parties will always bargain to an efficient result).}

My analysis also helps explain the exceptions to the general rule that courts enforce inefficient contracts. In particular, traditional efficiency-based accounts cannot explain the courts’ emphasis on unusual circumstances as a prerequisite to discharge of contractual obligations on grounds of impracticability or impossibility. An account that views contract law, not as assuring efficiency, but as providing a stable environment for parties to cooperate over long periods of time provides a more convincing explanation of these excuse doctrines.\footnote{Cf. Richard Speidel, \textit{The Characteristics and Challenges of Relational Contracts}, 94 NW. U. L. Rev. 823, 824 (2000) (describing long-term cooperative relationships as hallmarks of “relational contracts”).}

Recognizing that contract law manages change over time rather than ensures efficiency leads to a suggestion for enhancing economic analysis of contract law, increased emphasis on economic dynamic analysis—a form of institutional economic analysis that emphasizes analyzing bounded rationality and competing economic incentives in order to understand how law will actually influence future events.\footnote{See DRIESEN, \textit{supra} note 1, at 7-9 (describing economic dynamic analysis and its roots in institutional economics); Melvin A. Eisenberg, \textit{The Emergence of Dynamic Contract Law}, 88 Cal. L. Rev. 1743, 1811 (2000) (finding bounded rationality “especially salient” to understanding contracts).} I show that Ian Ayres and Robert Gertner have, in fact, employed economic dynamic analysis in their seminal work on default rules in contract and corporate law.\footnote{See generally Ian Ayres & Robert Gertner, \textit{Filling Gaps in Incomplete Contracts: An Economic Theory of Default Rules}, 99 Yale L. J. 87 (1989).} I will argue in a forthcoming book that many of our most perceptive scholars employ economic dynamic analysis in a variety of areas and provide a normative justification for emphasizing the study of economic dynamics.\footnote{See DAVID M. DRIESEN, \textit{The Economic Dynamics of Law} (2011) (forthcoming).} Here, I confine myself to arguing for an economic dynamic approach to contract law.

This article begins with an explanation of how the neoclassical model explains voluntary contracts. The second part explains and defends the hypothesis that contract law requires enforcement of inefficient bargains. The third part explains why enforcement of inefficient bargains...
serves important economic purposes. The fourth part explores the implications of recognizing the existence and value of judicial enforcement of inefficient exchanges. This recognition calls into question the idea of making efficiency the sole normative goal for contract, illuminates the dependence of efficiency analysis on temporal assumptions, and helps justify case law on the excuse doctrines. The fourth part closes with a call for an economic dynamic approach to contract law, an explanation of economic dynamic analysis to inform that approach, and a description of how leading scholars have tacitly begun to employ this approach.

I. EFFICIENT CONTRACTING

The neoclassical economic model provides a very satisfying explanation of why parties enter into contracts. Parties enter into contracts voluntarily. Accordingly, each party to the contract must anticipate that carrying out the deal embedded in the contract will provide benefits to herself exceeding her costs. For example, suppose that a homeowner offers to pay a painter $5,000 to paint her house. The homeowner must anticipate that the value of the benefit she receives, a new paint job, will equal or exceed the $5,000 cost she will incur if the painter accepts her offer. Similarly, if the painter accepts this offer, then he must anticipate that the $5,000 benefit he will receive will exceed the cost he incurs in painting the house—the value of the time spent doing the work and the cost of supplies. Economists define exchanges generating benefits exceeding costs for both parties as efficient, in the sense of being a “Pareto Optimal” exchange.

Pareto efficiency has special normative appeal precisely because it brings benefits to both parties to an exchange and parties make contracts to realize that sort of efficiency. Accordingly, my analysis of contract law’s inefficiency will define efficiency in terms of Pareto Optimality. I will, however, address contract law’s relationship to Kaldor-Hicks efficiency—the definition of a transaction as efficient when one’s party’s gains could, in principle, allow her to fully compensate any person who suffered losses from the transaction—in part IV. Kaldor-Hicks efficiency proves problematic normatively, because it does not require the party gaining from

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12 See Richard A. Posner, Economic Analysis of Law 11 (2nd ed. 1977) (stating that a voluntary transaction occurs when both parties expect it to make them better off).
14 See E.J. Mishan, Cost-Benefit Analysis 162 (1982) (defining Kaldor-Hicks efficiency in terms of the capacity to compensate losers, where or not compensation actually occurs).
a transaction to compensate the other party for her losses, but continues to play a role in law and economics.\textsuperscript{15}

The most fundamental models of markets build on this idea of Pareto efficient contracting. Neoclassical economics assumes that the homeowner expects a certain utility from her new paint job. Let us say that this utility equals $7,000. It follows that she will voluntarily pay any amount up to $7,000 for the paint job. She would prefer to pay as little as possible, of course, but she will pay any amount up to $7,000, but not one penny more. The painter’s utility will equal the payment for the paint job. The painter, however, will incur costs in realizing this utility. Suppose that the painter expects that he will need to devote $3,000 worth of his time on the job and to spend $1,000 on supplies. He will be willing to undertake the job for any amount exceeding her $4,000 cost. The painter will prefer to get paid as much as possible, but any amount over $4,000 provides sufficient utility to justify the cost.

In this case, the parties will agree on a paint job costing between $4,000 and $7,000. Any deal in that range will provide an efficient exchange making both parties better off. And, of course, this basic model applies to all kinds of contracts, not just painting contracts. People make deals because their expected utility functions overlap.

The explanation above uses the words “anticipate” and “expect” a lot, for a reason. People contract in order to try and realize an exchange in the future, and they do so based on their expectations for the future.\textsuperscript{16}

Suppose, however, that the buyer is completely insane and the idea of a newly painted house calls forth a vision of a luminous house unlike that produced by any real world paint job. In that case, her expectations may bear no relationship to the utility an actual paint job will provide. The completed house will look nice, but it will provide nothing like the degree of utility she envisions when she agrees to spring for $5,000. If that is true, then her agreement to the exchange will not indicate likely Pareto Optimality. Neoclassical economists address this problem by assuming that market actors are rational, in that they rationally pursue their own purposes.\textsuperscript{17}

Now suppose that the painter has no idea how much time the job

\textsuperscript{15} See David M. Driesen, The Societal Cost of Environmental Regulation: Beyond Administrative Cost-Benefit Analysis, 24 ECOLOGY L. Q. 545, 580 (1997) (pointing out that because Kaldor-Hicks efficiency lacks Pareto Optimality’s “attractive consensual” feature, it is less normatively attractive).


\textsuperscript{17} See POSNER, supra note 12, at 12 (describing the assumption that human behavior is “rational and self-interested” as a “basic economic assumption.”)
will require or how much supplies will cost. In this case, there is no reason to think that the $5,000 payment the painter has agreed to accept will exceed the painter’s cost and agreement does not necessarily indicate a likely Pareto Optimal exchange. Neoclassical economists solve this problem by assuming that actors have perfect information. It is reasonable to assume that well-informed rational actors’ voluntary contracts will usually lead to efficient exchanges.\(^{18}\)

Notice that the neoclassical economists’ standard assumptions of perfect information and rationality provide a link between the moment of contracting and the future event of performance. These assumptions make it likely that the apparently efficient exchange anticipated in the contract will prove efficient when the exchange occurs. In other words, these assumptions seek to overcome the vagaries of the links between current actions and future events.

We can extend this simple model temporally to explain a little more fully when a contract will likely produce voluntary compliance without formal invocation of law. Assume that the parties agree at \(t_1\) to a $5,000 paint job to be performed at a later time, \(t_2\). Suppose that nothing changes between \(t_1\) and \(t_2\). It is likely that the parties will perform their contract in this case.\(^{19}\) The transaction agreed to at \(t_1\) because it appeared efficient remains mutually advantageous at \(t_2\), so the parties will likely perform.\(^{20}\)

In most instances, neither party has a need to resort to contract law when the mutually advantageous deal at \(t_1\) remains mutually advantageous at \(t_2\).\(^{21}\) The law’s coercive force is not needed because performance is generally in both parties’ interest. Just as their self-interest was adequate to motivate voluntary contracting at \(t_1\), it should subsequently prove adequate to motivate voluntary performance at \(t_2\), at least in most cases.\(^{22}\)

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\(^{18}\) Id. at 11 (stating that “we can be reasonably confident” that a voluntary transaction produces a “net increase in efficiency”).

\(^{19}\) See Alan O. Sykes, The Doctrine of Commercial Impracticability in a Second-Best World, 19 J. LEGAL STUDIES 43, 53 (1990) (constructing a model based on the assumption that sellers will not breach when the cost of performance is less than the contract payment).

\(^{20}\) Cf. POSNER, supra note 12, at 65 (stating that the exchange process operates reliably in “many cases . . ., especially where the exchange is simultaneous” the parties “fully and correctly apprehend” the exchange’s costs and benefits).

\(^{21}\) I do not mean to suggest that these are the only cases where contracting parties are likely to self-enforce. See Alan Schwartz & Robert E. Scott, Contract Theory and the Limits of Contract Law, 113 YALE L. J. 541, 546 (2003) (pointing out that parties will self-enforce when the losses are less than the stream of future benefits from a series of future contracts or less than the value of reputational damage from a breach).

II. INEFFICIENT CONTRACT LAW

A variation on this simple temporal model can explain why parties sometimes resort to contract law, rather than voluntary fulfillment of promises. Suppose that the painter’s cost rises between \( t_1 \) and \( t_2 \) so that at \( t_2 \) it exceeds the $5,000 the homeowner has promised to pay for the paint job. This could occur because the painter underestimated the amount of time the job requires (a fairly common problem with contracting for paint jobs or construction) or because the cost of paint rose. At this point, the painter has an interest in not painting the house, because the cost of the job outweighs the benefit (a $5,000 payment). Because it is not in her interests to complete the job, she may fail to perform.\(^{23}\)

Economically speaking, exchange can also become inefficient because new opportunities arise. For example, suppose that at \( t_1 \) our painter agrees to paint the house in our earlier example for $5,000 at \( t_2 \). Before \( t_2 \) occurs, a second homeowner offers our painter $10,000 to paint his house at \( t_2 \). Assume no flexibility about timing in either case. If the painter fulfills the original contract, he will incur a $5,000 opportunity cost, the difference between the $10,000 foregone opportunity and the $5,000 earned under the original contract. Neoclassical economics treats lost opportunities as equivalent to losses, so this implies a $5,000 loss. It has now become inefficient for the painter to fulfill the contract.\(^{24}\)

If the painter does not paint the house, the homeowner may sue to compel performance. The purpose of contract law, of course, is to compel performance of a contract when promised performance does not occur. Law is about compulsion, always, even if the compulsion follows voluntary agreement.\(^{25}\) A court enforcing a contract will compel the breaching party to perform or pay damages. It does not secure voluntary compliance; it coerces compliance with a contract when one party has decided not to comply.

In other words, law comes into play when a voluntary agreement at \( t_1 \) does not lead to voluntary compliance at \( t_2 \). This difference between \( t_1 \) and \( t_2 \) frequently arises because intervening events have made a contract that

\(^{23}\) See Goetz & Scott, supra note 16, at 1273 (characterizing a new event making contractual performance a losing proposition as a “regret contingency”).

\(^{24}\) See Posner, supra note 12, at 89-90 (using a different hypothetical to illustrate the desirability from an efficiency standpoint of allowing parties to breach contracts when a better opportunity arises); Craswell, supra note 7, at 634 (describing the situation of a seller under contract for the sale of goods breaching because somebody else offered a higher price for the same goods as the situation “most often modeled” in discussions of efficient breach).

\(^{25}\) See Llewellyn, supra note 22, at 711 (describing contractual enforcement as the “forcible holding of a man . . . to a promise”).
appeared to serve both parties interests cease to serve one party’s interests.\footnote{See Sykes, supra note 19, at 48-49 (characterizing cases involving “sellers whose fixed-price contracts have become highly unprofitable” as “the most commonly litigated cases.”); Charles Goetz & Robert Scott, Liquidated Damages, Penalties, and the Just Compensation Principle: A Theory of Efficient Breach, 77 COLUM. L. REV. 554, 564 (1977) (describing “changed conditions” modifying an agreement’s “perceived advantages” as the ordinary “motivation for breach”).}

If follows that law usually comes into play when performance of a contract becomes inefficient. Recall that neoclassical economics defines efficiency during contract formation in terms of a transaction generating a Pareto Optimal exchange, meaning a transaction that benefits \textit{both parties}. Non-performance triggering contract law usually indicates that the transaction itself did not benefit both parties. The transaction, of course, occurs at $t_1$. Contract law comes into play when a transaction that appeared Pareto Optimal at $t_1$ reveals itself to be inefficient, or at least not Pareto Optimal, at $t_2$.

Contract law generally does enforce contracts in some fashion, even when one party does not want to perform. Classical contract law, summarized by the dictum \textit{pacta sunt servanda} (agreements must be observed), provided at best limited exceptions to this duty to perform.\footnote{See Waukesha Foundry v. Industrial Eng’g, 91 F.3d 1002, 1010 (7th Cir. 1996) (equating \textit{pacta sunt servanda} with the idea that “a deal’s a deal”); see, e.g. Stees v. Leonard, 20 Minn. 494, 20 Gil 448 (1874) (awarding damages for failure to comply with a contract for erection of a building, when the contractor constructed a three story building twice, only to have it collapse because of quick sand); Butterfield v. Byron, 27 N.E. 667 (Mass. 1891) (holding a contractor liable when the building he constructed burned to the ground after being struck by lightning).}

Indeed, some early English cases appear to take the position that even the impossibility of performance does not excuse a breach of contract.\footnote{See, e.g., Paradise v. Jane, 23 Car. Rot. 897 (stating that when a party “by his own contract creates a duty . . . upon himself, he is bound to make it good, if he may, notwithstanding any accident or inevitable necessity”).} Under that theory, even if our hypothetical house went up in flames before the painter could complete his paint job, a court would hold the painter liable for breach of contract. More commonly, the common law only excused performance for acts of God and other similar unusual contingencies outside of the parties’ control.\footnote{See, e.g., 407 East 61st Garage, Inc. v. Savoy Fifth Ave. Corp., 244 N.E.2d 37, 41 (N.Y. Ct. App. 1968) (describing the impossibility defense as limited to “destruction of the means of performance by an act of God, \textit{vis major}, or by law”) (citations omitted). Cf. William Herbert Page, The Development of the Doctrine of Impossibility of Performance, 18 MICH. L. REV. 589, 592-94 (1920) (noting that while the courts sometimes cite an act of God in excusing performance, the impossibility defense extends to acts of human agency and do not include all acts of God).}

Even under the modern law of contracts, which excuses
performance more liberally, a price rise that does nothing more than make a contract a money loser for one party does not excuse performance. The Uniform Commercial Code (UCC) § 2-615(a) provides an impracticability defense to sellers failing to deliver goods in a timely manner, but the commentary on that section insists that “increased cost alone does not excuse performance,” while acknowledging that some unusual contingencies raising prices might furnish a valid excuse, such as war or local crop failure. Furthermore, “a mere showing of unprofitability”—a showing sufficient to show a lack of Pareto Optimality—does not (without more) “excuse performance.” For example, in *Neal-Cooper Grain Co. v. Texas Gulf Sulphur Co.* the 7th circuit ordered damages paid for breach of a contract to deliver fertilizer. In response to Texas Gulf Sulphur’s argument that the Canadian government’s closure of the mine it intended to rely on as a supply source made fulfillment of the contract “impracticable,” the court held “the fact that performance has become burdensome or unattractive is not sufficient for performance to be excused.” In demanding “unattractive” performance, it implicitly denied the relevance of efficiency to contract law; for Pareto Optimal exchange is, by definition, attractive to both parties. The law regularly enforces bargains that the parties expected to be Pareto-efficient, but proved not to be.

Notice that models to address the problem of an unforeseen event occurring between $t_1$ and $t_2$ cannot be based on perfect information. The problem of an unforeseen event arising occurs because parties cannot have perfect information about the future, which is, in a fundamental way, always unknowable.

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32 U.C.C. § 2-615(a) cmt. 4 (1977).

33 *Schafer v. Sunset Packing Co.*, 256 Or. 539, 474 P.2d 529, 530 (1970). Cf. *Florida Power & Light v. Westinghouse*, 826 F.2d 239, 277 (4th Cir. 1987) (finding impracticability when a loss was “four or five times the expected profit”); Sykes, supra note 19, at 77-79 (criticizing the reasoning in *Florida Power* and finding it has nothing to do with efficiency).

34 508 F.2d 283 (7th Cir. 1974)

35 Id. at 293-295 (denying a defense of commercial impracticability and giving instructions to the trial court about how to ascertain the amount of damages).

36 Id. at 293.

37 See, e.g., *Transatlantic Financing Corp. v. United States*, 363 F.2d 312 (1966) (closure of Suez Canal producing an additional $44,000 in cost from longer shipping route does not excuse payment of the $305,843 contract price).

Thus, parties contract in order to realize an efficient exchange. But the law of contracts exists to force the exchange to occur, or an appropriate monetary substitute, when the transaction proves inefficient and therefore induces the losing party to breach the contract.

III. THE PURPOSES OF ENFORCING INEFFICIENT BARGAINS

Enforcing inefficient bargains serves the purpose of fostering economic cooperation over extended periods of time. In societies without well-developed formal legal systems to enforce inefficient bargains, some exchange still occurs. But the exchanges may often be limited to instantaneous sales. Long-term cooperation in such societies typically arises between people sharing kinship ties or other long-term affiliations that allow them to trust each other to carry out bargains without invoking a legal system’s formal mechanisms of coercion. Long-term cooperation between strangers may be hard to come by in such societies, and this dearth limits opportunities for economic development. Enforcement of inefficient transactions increases parties’ willingness to contract in the first place. If a party can count on enforcement of a bargain, then it makes sense to contract at $t_1$ for performance at $t_2$, rather than just wait for $t_2$ in order to realize an instantaneous exchange. Parties in a system with regular enforcement of inefficient contracts will make contracts that appear efficient at $t_1$. They still have no incentive to choose contracts they expect will prove inefficient, (describing “much of the future” as inherently unknowable); see Posner, supra note 4, at 865 (commenting that if parties “could foresee every possible future state of the world’ and contract accordingly “contract law would be simple and uninteresting.”).

39 See Schwartz & Scott, supra note 21, at 558-59 (pointing out that the law of property adequately governs simultaneous exchange, but that the law of contract governs promises about future behavior).

40 See POSNER, supra note 12, at 66 (claiming that the absence of enforceable contractual rights biases investment toward short-term projects).

41 See Goetz & Scott, supra note 16, at 1272 (modeling the tendency of people to keep promises to family members and close friends); Macneil, supra note 38, at 718 (suggesting that in “traditional societies” kinship helps “project” exchange “into the future.”)

42 Schwartz & Scott, supra note 21, at 548 (describing “good contract law” as “a necessary condition for a modern commercial economy.”); Llewellyn, supra note 22, at 720-21 (explaining that informal sanctions may suffice where close ties and face-to-face dealings prevail, but that contract law is essential for long-range impersonal bargains and investment).

43 See Goetz & Scott, supra note 16, at 1264 (decisions to enforce promises influence “future promising.”).

44 See Schwartz & Scott, supra note 21, at 559-61 (explaining that absent enforcement of an original contract, sellers would refuse to contract to sell a specialized product at a future date). The law of anticipatory breach seeks to deal with this problem. Id. at 561.
because one party usually will not voluntarily agree to assume losses. And, as mentioned previously, many of the contracts that appear efficient at t₁ will prove efficient at t₂. Thus, enforcement of a few inefficient exchanges encourages many more efficient exchanges. In other words, optimizing each transaction that happens to end up in court does not necessarily optimize the far larger universe of contractual exchange of which litigated cases form a tiny part.⁴⁵

The willingness to enforce inefficient exchange at the heart of contract law serves many purposes apart from encouraging efficient contracting.⁴⁶ The ability to count on performance (or a monetary equivalent) of a contract facilitates all sorts of economic planning and cooperation.⁴⁷ It greatly reduces transaction costs and creates important economic growth opportunities,⁴⁸ and may do so even when the exchange itself is inefficient.

Let us return to our painting example to illustrate contract law’s capacity to foster economic growth by reducing transaction costs. If our homeowner could not rely on the painter performing, because the painter remains free to walk away if a better opportunity arises, she might try to line up back-up painters or constantly contact her original painter to try and anticipate a potential breach (hoping to call up new painters once a breach appears imminent). If the painter in fact walked away, she would incur additional transaction costs in finding a new painter. In a world welcoming inefficient breach of contracts, these transaction costs may multiply, because often a single contract forms but a part of a larger economic plan that a party struggles to coordinate and execute.⁴⁹ A paint job, for example, can constitute but one step of a remodeling project involving multiple contractors, with interdependent start and completion dates, so that a failure

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⁴⁶ Cf. POSNER, supra note 12, at 66 (emphasizing that contract law provides for more efficient allocation of resources, because a seller can look for the best deal with more temporal flexibility).

⁴⁷ See Feinman, supra note 45, at 742 (identifying allowing implementation of plans as a central norm in relational contract theory). Cf. Schwartz & Scott, supra note 21, at 556 (pointing out that enforcement of contract permits “persons to enlist other persons in their projects”).

⁴⁸ See Schwartz & Scott, supra note 21, at 562 (the absence of contractual enforcement helps explain the dearth of foreign investment in former Soviet States and many Third World countries).

⁴⁹ See Macneil, supra note 38, at 760 n. 201 (providing an example of a contract as part of a plan involving multiple parties and contracts); see generally Goetz & Scott, supra note 16, at 1267 (pointing out that advance notice of a benefit conferred via contract can encourage adaptive behavior that increases the value of the transaction promised).
to perform the paint job can lead to rescheduling other contractors and all of the costs (time and trouble) that implies. In such cases, transaction costs can become high enough to discourage worthwhile projects when the party coordinating a series of contracts cannot rely on performance, and some of these costs will go beyond the costs stemming only from a single contract.\(^{50}\)

Moreover, contracts do not merely allocate existing resources; they sometimes create economic growth opportunities. A contract between an inventor and a manufacturing firm to produce a new kind of product provides an example. Such a contract may bring to life an innovation having positive spillover effects benefitting society, leading to fresh economic opportunities for people other than the contracting parties.\(^{51}\) In such cases, even a contract that causes losses to one or both of the contracting parties can produce economic growth of much greater value than the losses stemming from contractual performance.\(^{52}\)

I have argued elsewhere that economic growth frequently involves inefficiency, since it often stems from sometimes unsuccessful experimentation and loss.\(^{53}\) For example, e-commerce—commerce conducted over the internet—rests on a foundation of inefficient transactions. Amazon.com, which pioneered the e-commerce model, engaged in numerous inefficient money losing transactions, leading to years of business losses, in order to entice customers to become accustomed to making purchases in cyberspace.\(^{54}\) Although the law and economics of contract has focused on the microeconomics of individual exchange, the economic dynamics of contract law may have greater importance.\(^{55}\) That is,\

\(^{50}\) See, e.g., Leon K. Trakman, *Winner Take Some: Loss Sharing and Commercial Impracticability*, 69 Minn. L. Rev. 471, 489 (1985) (explaining that termination of a long-term relationship without modification of an agreement can lead to “exit” and “start up” costs).

\(^{51}\) See generally Brett M. Frischmann & Mark A. Lemley, *Spillovers*, 107 Colum. L. Rev. 257 (2007) (explaining that intellectual property often generates positive spillovers, benefits that accrue to non-parties to a transaction).


\(^{53}\) See DRIESEN, supra note 1, at 5 (noting that innovation and growth depend upon experimentation, which often involves failure and inefficiency).

\(^{54}\) See id. at 6 (explaining that Amazon.com incurred substantial losses in its early years and predicting that if the company survived it would show that “inefficient investment” proved beneficial over the long term).

\(^{55}\) See id. at 4 (questioning whether static efficiency merits the “obsessive attention” it has received in light of the importance of economic growth stemming from innovation and change).
contract law may create the security people need to take the risks that produce economic growth in the long run, even if many transactions leading to this growth prove inefficient. In other words, the macroeconomics of contract law, its role in providing a framework for economic growth, may matter far more than the consistent achievement of microeconomic efficiency in each transaction.

Contract law seeks to give economic actors a stable framework in which to plan, in spite of the inevitability of change in a dynamic world. It manages change over time, not by assuring that every transaction has a happy ending for all involved, but by making economic cooperation between strangers over time a reasonable thing to undertake.

This implies that contract law does not ensure efficiency. Rather, it provides a framework that parties can employ to pursue their own purposes, including the purpose of mutually beneficial exchange. Markets may tend toward efficient outcomes. But the law’s pursuit of inefficiency plays an important role in making that possible and in providing even more important benefits.

IV. IMPLICATIONS

Contract law’s inefficiency raises some major questions about the rationale for making the pursuit of efficiency the central project of contract law scholarship, helps explain the disparate results evident in law and economics scholarship, and provides a basis for a more sympathetic understanding of contract law itself. It suggests, I argue, that we should embrace an economic dynamic approach to analysis, which, I show, some leading scholars have already pioneered in this area. I will consider each of these points in turn, focusing on the law governing what happens when a party does not perform contractual obligations to illustrate them.

A. On Efficiency’s Centrality

Richard Posner’s early work provides a seemingly cogent rationale for making efficient contract law the primary normative goal for judicial

56 See generally Atiyah, supra note 1, at 197-98 (noting that the primary purpose of contract enforcement is to encourage people to keep their promises).
57 See id. at 199 (describing contract as encouraging cooperation and planning but accepting that “some would rise and some would sink”).
59 See generally Macneil, supra note 2, at 893 (stating that there may be good reasons for contract law not to track the norms governing contracting).
Inefficient contract law, Posner wrote, would prove futile, because parties seeking mutually beneficial exchanges would generally contract around it. This futility rationale fails to appreciate contract law’s temporal dimension and its limitations as a device to cope with the uncertainty that afflicts any effort to address the future. Since parties cannot predict what will occur between t₁ and t₂, they will not necessarily anticipate which common law rules will prove inefficient at t₂. They cannot contract around inefficient judicial rules unless they can anticipate which judicial rules will prove inefficient in their case, which they often cannot do at t₁.

Recognition that the common law insists on inefficiency and in doing so may facilitate parties’ efforts to provide a stable framework for their projects in an uncertain world casts some doubt on the wisdom of making efficiency such a dominant consideration in contract law scholarship. Although, recognition of contract law’s inefficiency does not necessarily prove that the traditional efficiency project lacks normative value, the analysis supporting it does cast doubt on one of the major arguments for making efficiency the dominant goal of contract law scholarship.

B. A Temporal Explanation for Efficiency Analysis’ Struggles

The analysis undergirding the tension between efficient contracts and inefficient contract law helps explain the difficulties efficiency-based scholars have experienced in reaching consistent results. The efficiency-based approach has a positive dimension. Richard Posner’s early work attempted to show that the common law of contract is efficient. Eric Posner in a thoughtful review of the law and economics of contract

60 Richard A. Posner & Andrew M. Rosenfield, Impossibility and Related Doctrines in Contract Law: An Economic Analysis, 6 J. LEGAL STUDIES 83, 89 (1977) (“If the rules of contract are inefficient, parties will ... contract around them”). Accord Schwartz & Scott, supra note 21, at 546 (“firms will contract away from ... legal rules that do not maximize joint surplus”).

61 Cf. Posner & Rosenfield, supra note 60, at 89 (qualifying his claim that parties will contract around inefficient rule by recognizing an exception when “transaction costs . . . outweigh the gains from a more efficient rule.”)


63 See generally Eisenberg, supra note 3, at 812 (arguing that contracting parties systematically underestimate future risks).

64 Craswell, supra note 52, at 904 (suggesting that Richard Posner aimed to demonstrate contract law’s efficiency and that this claim became viewed as a central claim of law and economics).
concludes that this project has failed. In explaining the reasons for this failure, he echoes a familiar institutional economic critique of neoclassical economics in general; models simple enough to yield definite predictions fail to sufficiently capture the real world, and models rich enough to reasonably emulate the real world fail to yield definitive predictions. Although this may often be correct, the need to enforce inefficient exchanges in order to foster future efficient contracts suggests a more specific problem: Efficiency has a temporal dimension. What appears efficient over one timeframe is not necessarily efficient over another. Analysts obtain varying results, because results depend in part on the timeframes employed in the underlying models.

The insight that inefficient performance creates a lot of contract law suggests that efficiency analysis requires a unified treatment of the question of what to do when breach occurs. Traditional law and economics bifurcates consideration of what happens after performance becomes inefficient mostly along doctrinal lines found in the case law. Courts address this problem through two sets of rules. The first governs contractual remedies, such as when to award damages and when to order specific performance. The second set of rules governs affirmative defenses, such as the defenses of impracticability and impossibility. The law and economics of contract law, while sometimes unifying the economic analysis

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65 See Posner, supra note 4, at 830 (stating that the models do not “predict contract doctrine.”). Cf. Ian Ayres, Valuing Modern Contract Law Scholarship, 112 YALE L. J. 881, 881-82 (2003) (not contesting Posner’s descriptive claim about law and economics’ failure to “predict” common law rules, but finding more normative value in recent law and economics contract scholarship than Posner does); Craswell, supra note 52, at 923-24 (not contesting Posner’s specific claims, but arguing that the law and economics of contract has been successful at casting some light upon normative choices).


67 Cf. Daniel Farber, Reassessing the Economic Efficiency of Compensatory Damages for Breach of Contract, 66 VA. L. REV. 1443, 1449-50 (1980) (explaining that the simplest model of all, one that ignores transaction costs, cannot yield definitive results, since that model predicts that all rules are efficient).

68 Eric Posner implicitly recognizes this when he explains that contract remedies influence the “search for the optimal partners prior to contracting.” Posner, supra note 4, at 838. This comment represents a shift in temporal frame from a post t₁ to a pre-t₁ perspective.


71 See Id. ch. 9 (summarizing the doctrines of mistake, impracticability, and frustration).
of different affirmative defenses, usually treats the economics of affirmative defenses and remedies as separate questions and uses differing modes of analysis for each question.

The judge facing this problem of what to do when a promisor breaches a contract has three principle options. She can discharge the obligation, order the payment of damages, or require specific performance. One might think that efficiency-based law and economics scholarship would offer a simple unified answer to this question of what courts should do when performance becomes inefficient in all cases: namely, that when performance of an obligation has become inefficient the court should discharge the obligation. But the common law does not produce this or any other unified answer to the question of what to do about inefficient performance. And law and economics in an attempt to justify, at least to some extent, actual legal doctrine addresses the problem of the tension between an efficient ex ante contract and inefficient ex post performance by employing inconsistent timeframes for analysis to try and produce results bearing some resemblance to the common law.

1. The \( T_2 \) Approach to Damages and Efficient Breach

The law and economics addressing “efficient breach” focuses on the law of contractual remedies. Many contracts scholars working in the neoclassical tradition of law and economics favor the idea that when fulfilling a contract becomes so costly in \( t_2 \) that performance would no longer lead to an efficient transaction, the party facing the high costs should be encouraged to breach the contract. Thus if a painter with a contract for

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72 See, e.g., Posner & Rosenfield, supra note 60, at 84-86 (arguing for a unified approach to “discharge cases” involving the affirmative defenses of impossibility, impracticability, and frustration of purpose).

73 See POSNER, supra note 12, §§ 4.5, 4.9 (treating the law and economics of “impossibility and related doctrines” separately from that of “contract damages”). Cf. Melvin A. Eisenberg, Impossibility, Impracticability, and Frustration, 1 J. LEGAL ANALYSIS 207, 242-47 (2009) (urging a form of expectation damages as relief for violation of a “bounded-risk” test derived from impracticability doctrine); White supra note 69, at 353 (calling for a theory unifying remedy and discharge analysis).

74 To simplify the exposition and align it with the dominant discourse in law and economics, I ignore, for the time being, the remedy of reformation of the contract. Cf. Posner & Rosenfield, supra note 60 (discussing the law of discharge, but ignoring reformation). I do, however, mention reformation below when necessary to qualify an assertion.


76 Birmingham, supra note 13, at 284 (arguing that repudiation of a contract should be encouraged when the breaching party profits after compensating the other party to the
a $5,000 paint job finds that the job would cost $7,000 to perform (or $5,001), she should usually feel free to breach the contract. Similarly, if the painter contracted for a $5,000 paint job, but had an opportunity to earn $7,000 by substituting another job, she should usually feel free to breach the contract. Contract scholars refer to this as “efficient breach” since breaching the contract avoids an inefficient transaction.

Most contract scholars, however, do not recommend discharge of contracts that demand performance that appear inefficient; instead they endorse the common law rule that the breaching party should pay damages representing the expectations of the promisee, the homeowner in my painting example. They typically justify this endorsement of the expectation damages remedy by arguing that it provides sufficient incentives to avoid inefficient breach. To see why expectation damages should provide incentives to avoid inefficient breach imagine that the painter’s costs for the $5,000 paint job have risen to $6,000, but that the contracting homeowner’s expected utility from the $5,000 job equaled $7,000. In that case, performance for a $5,000 payment would produce a $2,000 benefit to the homeowner ($7,000-$5,000) and only a $1,000 loss to the painter ($5,000-$6,000). Breach would be inefficient, say the proponents of expectation damages, because performance would generate a $1,000 net benefit ($2,000-$1,000).

This argument assumes a redefinition of efficiency. An exchange involving a loss to one party (the painter) flunks the Pareto efficiency test.

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77 See POSNER, supra note 12, at 90 (using a similar example and arguing that breach of contract “should be encouraged” as value maximizing in this situation).
79 See Posner, supra note 4, at 834-35 (explaining that law and economics scholars have argued that an expectation measure of damages encourages only efficient performance); see generally Atiyah, supra note 1, at 210-11 (distinguishing expectation damages from damages predicated on reliance). Cf. Daniel Friedman, The Efficient Breach Fallacy, 18 J. LEGAL. STUD. 1, 3 (1989) (claiming that while the efficient breach theory was “originally . . . preached” without “qualification,” the modern position distinguished between “opportunistic breach” and other inefficient breaches).
80 See POSNER, supra note 12, at 90 (explaining the reasons for this conclusion); cf. Craswell, supra note 7, at 636-37 (pointing out that expectation damages do not fully compensate promises, because they often exclude, attorneys’ fees, subjective losses, and unforeseeable damages); Sebert, Punitive and Nonpecuniary Damages in Actions Based on Contract: Toward Achieving the Objective of Full Compensation, 33 UCLA L. REV. 1565 (1986) (discussing in detail the reasons that damages often are not fully compensatory).
81 See White, supra note 69, at 357 (explaining the efficient breach theory algebraically).
But because the homeowner receives enough added utility so that she could, in principle, compensate the painter for the loss, this sort of transaction satisfies the criterion for Kaldor-Hicks efficiency.

As long as the painter must pay the $2,000 net benefit that the homeowner expects under the contract in the event of a breach as expectation damages, the painter has an incentive to perform this unprofitable contract, since not performing will raise his losses from $1,000 to $2,000. If the painter, however, could secure a discharge of the contract, he would avoid a $1,000 loss and have no incentive to perform this unprofitable, but still Kaldor-Hicks efficient, contract. Hence, expectation damages provide an incentive to breach inefficient contracts, while carrying out Kaldor-Hicks efficient contracts.

This analysis employs a post-timeframe for analysis. It is concerned with efficiency over the timeframe that begins when a new circumstance arises after t₁ rendering a contract unprofitable until the time a judge considers and decides a case, t₃.

This justification for preferring expectation damages to discharge of an inefficient contract depends not only on a particular timeframe, but also upon a strong perfect information assumption. The painter, in order to receive the proper signal to avoid inefficient breach and commit efficient breach whenever possible must know the utility function of the homeowner. In this example, the painter must somehow have figured out that notwithstanding the $5,000 contract price, the homeowner, in fact, was willing to pay up to $7,000 for the job. This sort of knowledge may often prove difficult to come by for the following reasons. A contracting party has an incentive not to disclose his utility function to the other party, because doing so helps the other party secure more of the gains from trade at the disclosing party’s expense. Second, a utility function is an abstract concept used in economic modeling that in many contexts proves difficult to discover.

Cf. Llewellyn, supra note, at 738 (expressing doubt that damages deter breach).

See Friedman, supra note 79, at 10 (pointing out that it’s very difficult to know how much value a homeowner would place on a renovation); Alan Schwartz, The Case for Specific Performance, 89 YALE L. J. 271 (1979) (arguing that valuation difficulties are ever present so that specific performance is a better default rule than the payment of damages).

Cf. Posner, supra note 4, at 836 (finding expectation damages undesirable when information is asymmetric).

See MARK SAGOFF, PRICE, PRINCIPLE, AND THE ENVIRONMENT 80-83, 94-100 (2004). Sagoff distinguishes between market prices and the maximum willingness to pay, arguing that market prices do not measure consumer benefit, because they are more driven by production costs than willingness to pay. Id. at 81-82. He shows a utility function’s abstractness by demonstrating that maximum willingness to pay is not measurable. Id. at 82-83, 94-100. Fortunately, maximum willingness to pay, not a market price, determines the amount of consumer surplus (or more precisely promisee surplus) involved in an
utility function, the painter cannot predict whether breach will prove efficient or not under a rule embracing expectation damages. Accordingly, the expectation damages rule does not necessarily enable a promisor to carry out “efficient” breach while eschewing inefficient breach. Hence, if one relaxes the perfect information assumption at the heart of neoclassical law and economics and acknowledges that breach occurs with uncertain knowledge about its future effects on the non-breaching party, then there is an uncertain basis for choosing between the expectation damages rule and discharge, at least from the temporal perspective usually employed to analyze efficient breach, which basically starts sometime after $t_1$ when breach is contemplated.

A shift in temporal frame backward in time to $t_1$, however, might provide a more robust justification for the preference for expectation damages. Judicial handling of breach after $t_2$ will influence parties’ willingness to contract at $t_1$ in the first place.\(^{86}\) If the promisee (the homeowner in this case) cannot rely on obtaining the benefits contracted for in the first place, why bother with a contract? Hence, a rule requiring expectation damages will provide more security for contracts than a rule permitting discharge in the event of efficient breach.\(^{87}\)

Yet, once one moves back in time to $t_1$ and relaxes the unrealistic perfect information assumption, the idea that one wants to encourage efficient breach comes into doubt. At $t_1$, the parties do not know that a party

\(^{86}\) See Craswell, supra note 7, at 630-31 (characterizing early analysis of efficient breach as “too narrow” because of failure to consider remedies’ influence on the willingness to contract and other questions at $t_1$).

\(^{87}\) Cf. Sykes, supra note 19, at 83 (pointing out that application of the impracticability doctrine to cases involving a poorly chosen escalator clause may encourage breach in hopes of obtaining a discharge).
will ultimately find a contract unprofitable and might want to breach. So, any rule or attitude that encourages nonperformance lessens the value of contracting, as parties would like to be able to count on their commercial plans being carried out.

Instead of facing the likelihood that most parties contract to reduce their uncertainties in an uncertain world, law and economics generally approaches the problem of the apparently efficient becoming inefficient through the endorsement of legal fictions.\footnote{See Sheldon W. Halpern, Application of the Doctrine of Commercial Impracticability: Searching for the Wisdom of Solomon, 135 U. PA. L. REV. 1123, 1127-28 (1987) (describing the presumption that parties intended what they reasonably would have intended had they confronted the new circumstances arising in a case as a “fiction”).} That is, many law and economics scholars ask what the parties would have wanted had they faced the circumstance making performance inefficient—just as courts often do.\footnote{See, e.g., Posner & Rosenfield, supra note 60, at 98 (characterizing the supply of contract terms that the “parties would have adopted if they had expressly negotiated over them” as “the purpose of an economically based discharge doctrine.”); Craswell, supra note 7, at 633 (characterizing the approach of recommending the rule that parties would prefer as “by far the most common approach” to contract remedies). Cf. Page, supra note 29, at 600 (referring to the creation of an “implied condition” as a “fiction”).} Hence, a subsidiary justification for the attitude and rule favoring efficient breach comes from the assumption that parties would have contracted for expectation damages if they had provided for the possibility of breach at all.\footnote{Cf. Llewellyn, supra note 22, at 732 (arguing that “no man is safe” if courts construe contracts not to have the result that seems intended).}

The tension between efficient contracting and efficient contract law illuminates an important ambiguity in this position. The endorsement of what the parties “would have done” does not refer explicitly to \( t_1 \) or \( t_2 \). We know that the parties did not contract for expectation damages explicitly; hence a court relying on the fiction does not effectuate a presumptively efficient contract actually entered into at \( t_1 \).\footnote{See Halpern, supra note 88, at 1140 (expressing doubt that courts can construct actual intent in the face of contractual silence). Cf. Melvin A. Eisenberg, supra note 73, at 212-24 (explaining why bounded rationality indicates that “some things go without saying” in a contract).} From the perspective of \( t_2 \), we know that performance would prove inefficient, and no decision about whether or not to order a transfer payment (damages) will cure that. Except perhaps for reformation of the contract to change its terms to create a new mutually beneficial contract, a court lacks the power to restore an efficient bargain once circumstances have rendered performance inefficient.\footnote{See generally Mark P. Gergen, A Defense of Judicial Reconstruction of Contracts, 71 IND. L. J. 45 (1995); Trakman, supra note 50, at 487 (endorsing modification of contracts involving interdependent parties in a long term relationship in a relatively closed market, but not for “low-volume, short-term contracts”).} This
fiction then obfuscates time and circumstances’ defeat of the parties’ intentions to realize an efficient bargain. And it draws attention from legislative task implicit in an efficiency based approach to remedies, the task of writing rules for the benefit of other parties than the ones before the court. That task, of course, involves a conflict between writing rules to encourage efficient conduct at \( t_2 \) and writing rules tending to encourage maximization of the number of efficient contracts to be entered into at \( t_1 \).  

The legal fiction also raises some problems for party autonomy.\(^93\) Parties remain free to write a contract to say that a cost rise above a certain amount excuses performance with or without damages. If they did not do so, this might suggest that they wanted performance, pure and simple.\(^94\)

An even bigger problem for efficient breach comes from recognition of transaction costs. One virtue of a tradition of voluntary performance, even in the case of a contract becoming inefficient, is that it avoids the expense and trouble of litigation. Since in the presence of a loss parties often cannot separate efficient from inefficient breach very readily owing to imperfect information, one would expect that encouragement of efficient breach would lead to frequent litigation.

Once analysts consider litigation and transaction costs, however, a question about expectation damages and efficient breach comes from another direction. Daniel Farber has pointed out that expectation damages may prove insufficient to deter inefficient breach of contracts with consumers.\(^95\) Since most consumers will not have the resources to sue for breach of contract, courts may need to award damages exceeding expectation damages in the handful of cases that get litigated just to deter companies from taking advantage of consumers’ inability to enforce their contractual rights.\(^96\) Farber’s insight helps justify the continued existence of some awards of super compensatory damages in contract cases.\(^97\)

2. The \( T_1 \) Approach to Affirmative Defenses

Although the standard law and economics of efficient breach and

\(^{93}\) See Halpern, supra note 88, at 1167 (discussing the tension between “freedom of contract” and presumed intent).

\(^{94}\) Cf. Page, supra note 29, at 600 (characterizing treating a question of whether to discharge a contract for impossibility as one about parties’ intentions as harmful when parties had no intention respecting the facts giving rise to the defense).

\(^{95}\) See Farber, supra note 67, at 1455-64. Cf. Craswell, supra note 7, at 664-665 (finding Farber’s rationale “somewhat problematic,” because of how it influences decisions other than the initial one of selecting contracting partners).

\(^{96}\) Farber, supra note 67, at 1444-45 (discussing how consumers’ frequent inability to litigate or detect violations makes damages exceeding compensatory damages desirable).

\(^{97}\) See id. at 1445 & n. 14 (using the term supercompensatory damages to describe any damage award exceeding the amount needed to fully compensate the plaintiff).
damages tends to focus on the post-contractual timeframe beginning after an event raising performance’s cost, the leading articles on the excuse doctrines (primarily the doctrines of impossibility and impracticability) employ a larger timeframe habitually, beginning their analysis at the time of contracting, $t_1$. From the $t_2$ standpoint, one might argue that courts should excuse performance whenever performance would prove impossible and award damages whenever performance is merely inefficient. This position would amount to a repudiation of the impracticability doctrine, a position broadly consistent with earlier mainstream common law. The position that impracticability should give rise to expectation damages rather than excused performance would be broadly consistent with the position of those who insist that efficient breach should lead to expectation damages. That is, one would expect that in the face of commercial impracticability, breach would prove efficient, and therefore should be allowed, at least under the mainstream position on efficient breach, only upon payment of expectation damages (lest inefficient breaches be unduly encouraged).

Richard Posner and Andrew Rosenfield, however, justify the modern trend toward excusing “impracticable” performance by shifting the timeframe for analysis back to $t_1$. In a seminal article, they argue that “discharge should be allowed only where the promisee is the superior risk bearer.” This superior risk bearer approach makes the decision about whether to excuse performance hinge upon an analysis of who was in the best position to insure against a loss or to prevent a loss from occurring. Since a party would typically insure against a risk prior to the time when the risk could arise, this insurance function implies an evaluation of efficient risk bearing at the time of contracting, $t_1$. Risk prevention would presumably occur between $t_1$ and $t_2$, but prior to the risk actually arising. Hence, the efficient risk bearer approach to analyzing the economics of excuse implies a temporal frame reaching back to the time of contracting and proceeding forward up to the time the risk arose, with no consideration

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98 See Grant Gilmore, The Death of Contract 45-48 (1974) (discussing American common law’s position endorsing absolute liability, but suggesting that actual decisions were less absolute); Sykes, supra note 19, at 73-74 (noting that early common law confined itself to cases of impossibility, but that in time the courts accepted an impracticability defense).

99 See White, supra note 69, at 354 (taking the position that breaching a contract should always trigger damages, never discharge).

100 See Posner & Rosenfield, supra note 60, at 84 (arguing for the “economic logic” of the common law doctrines of impracticability and excuse).

101 Id. at 90.

102 See, e.g., id. at 100-108 (providing examples, all of which implicitly view the question of who could have managed the risk from the perspective of contracting before the risk arose).
of events at $t_2$ or later. In other words, the timeframe conventionally employed for analyzing application of the excuse doctrines lasts until the approximate time frame employed to analyze remedies begins.  

This approach also embraces a move away from assuring the efficiency of each individual contractual performance, the concern animating the efficient breach literature, to the creation of rules that Posner and Rosenfield imagine will encourage efficient risk allocation in a broad class of contracts at $t_1$. An economic dynamic focus on change over time raises some questions about this approach. Posner and Rosenfield point out that the excuse doctrines only come into play when contracts do not specifically allocate the risks of performance becoming impossible or impracticable. Parties presumably fail to allocate risks explicitly when the transaction costs of doing so exceed their best estimates of the value of explicitly allocating risks. That is, even if a court enjoying the benefit of hindsight can judge what risk allocation would have proven efficient, a failure to contract for that allocation suggests that \textit{ex ante} the value of explicit risk allocation was not apparent to the parties. It is not at all obvious that a rule favoring the party with the least ability to avoid or insure against the risk that produced litigation leads to more explicit and accurate evaluations of risk and their efficient allocation \textit{ex ante}. Indeed, it is not at all clear that any particular legal rule about what would happen in the case of impossibility or impracticability would lead to more efficient risk allocation, as the parties operate in a world of very incomplete information about the sorts of considerations that give rise to impracticability and impossibility claims. Also, Posner and Rosenfield’s analysis, in keeping

\begin{itemize}
  \item[103] These timeframes will dovetail precisely if the promisor makes a decision about whether to perform just after the changed circumstance raising the issue of non-performance arises and the risk prevention opportunity continues until then. A time lag, however, can exist between the last time available for preventing a risk and the time that the promisor contemplates breach.
  \item[104] See id. at 113 (characterizing their approach as focused on “\textit{ex ante} risk bearing”) [italics added].
  \item[105] Id. at 98-99.
  \item[106] See \textit{Scott}, supra note 75, at 862 (describing high transaction costs as the “first reason why parties might not write complete contracts”). Transaction costs, however, do not constitute the only explanation for failures to specifically allocate risks. See id. at 862-63 (discussing asymmetric information and the simple inability to foresee some future conditions at all as explanations for incomplete contracts).
  \item[107] See \textit{Eisenberg}, supra note 75, at 251 (describing Posner and Rosenfield’s tacit assumption that parties will appraise the relevant risks’ “probability and magnitude” as “incorrect”).
  \item[108] Cf. \textit{Aaron J. Wright, Note: Rendered Impracticable: Behavioral Economics and the Impracticability Doctrine, 26 Cardozo \textit{L. Rev.} 2183, 2200-11 (2005) (finding that bounded rationality influences a party’s ability to anticipate risks, but not the question of who is the least cost insurer of an identified risk).}
\end{itemize}
with the case law, focuses only on the risk that actually became a real impediment to carrying out the contract. But efficient *ex ante* contacting would demand efficient allocation of all of the risks that might impede the contract, not just the one that happened to come to fruition. The parties do not know which of the many risks that are out there matter *ex ante*. In short, there is no particular reason to assume that resolution of excuse cases based on hypothetical consideration of who would have been the most efficient bearer of the risk that happened to come to fruition will lead to more efficient contracts. This seems, arguably, like an effort to wish away the world of imperfect information in order to have contract law try to ensure efficiency to the greatest extent possible, even when the uncertain nature of the world means that parties cannot do this well with respect to many contingencies.\(^{109}\)

Not surprisingly, subsequent commentators have been less sanguine than Posner and Rosenfield about the prospects for efficient excuse doctrines. Alan Sykes, for example, in an exceedingly perceptive analysis comes to the conclusion that figuring out efficient impracticability doctrine is so difficult for a judge that courts attempting it may create transaction costs without generating any offsetting economic benefit.\(^{110}\)

Viewed from a different temporal frame of an instantaneous transaction at \(t_2\) and as a very limited question, however, the efficiency of excuse doctrines is not difficult at all. If performance has become inefficient, courts should not require performance. This claim begs the question of whether courts should order damages when performance becomes inefficient. But from the perspective of analyzing the efficiency of instantaneous exchange at \(t_2\) that question becomes pretty easy too: It does not matter. Damages when performance is inefficient simply involve a transfer payment that cannot influence efficiency.\(^{111}\) Hence, there may be some reason for courts to view such questions as implicating fairness more

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\(^{109}\) See generally Halpern, *supra* note 88, at 1160-61 (questioning whether parties are able to adequately assess and bargain about an array of risks at \(t_1\)).

\(^{110}\) See Eisenberg, *supra* note 3, at 812, 815 (stating that actors tend to ignore or underestimate future risks).

\(^{111}\) Sykes, *supra* note 19; see Eisenberg, *supra* note 73, at 251-53 (arguing that the Posner/Rosenfield test is not administrable by judges). Other commentators have simply opposed impracticability doctrine. See, e.g., George G. Triantis, *Contractual Allocations of Unknown Risks: A Critique of the Doctrine of Commercial Impracticability*, 42 U. TORONTO L. J. 450, 498 (1992) (opposing the doctrine on the ground that the parties, at some level, allocate unexpected risks and that courts are unlikely to improve the parties’ allocation); White, *supra* note 69, at 354 (opposing discharge of contractual obligations, because the remedy of expectation damages should prove more efficient).

\(^{112}\) See Friedman, *supra* note 79, at 8-9 (explaining that the question of how to remedy the problem of breach induced by an offer of a higher price for contracted for good implicates “entitlement,” not efficiency).
than efficiency.\textsuperscript{113}

3. Some Temporal Conclusions

Thus, the conflict between efficiency in one timeframe with efficiency in another gives rise to temporally inconsistent analysis of what to do about breach of obligations that become inefficient at \( t_2 \). Analysts habitually employ a \( t_1 \) timeframe to evaluate impracticability or impossibility while inconsistently employing a \( t_2 \) timeframe to analyze efficient breach and questions of remedy. Furthermore, for either affirmative defenses or damages questions, one can get different results depending on the temporal timeframe to evaluate efficiency.

The economic dynamics of contract suggest not only a temporal explanation for inconsistencies in efficiency analysis, but also a more fundamental problem with efficiency. Analysts routinely write as if a clear unitary concept governed the question of whether legal rules are efficient. More commonly than many legal analysts imagine, efficiency in one timeframe conflicts with efficiency in another.\textsuperscript{114} This means that efficiency provides a less than completely coherent guide to the evaluation of legal rules.

\textit{C. Understanding Impracticability as Management of Change over Time}

An understanding of contract law as an effort to encourage cooperative relationships over time provides a much more satisfying explanation of contract law’s main features than the efficiency-based perspective.\textsuperscript{115} A good illustration of this comes from the law of excuse mentioned earlier, which provides the major exception to the rule that courts enforce inefficient bargains.

Traditional law and economics scholarship finds it difficult to account for the rationales courts actually offer for rulings when parties raise defenses of impossibility or impracticability. Alan Sykes finds the excuse

\begin{footnotesize}
\begin{enumerate}
\item See Llewellyn, \textit{supra} note 22, at 746 (claiming that “fairness” is the goal of the doctrines of impossibility and frustration); \textit{see generally} George M. Cohen, \textit{The Fault that Lies Within Our Contract Law}, 107 Mich. L. Rev. 1445 (2009).
\item See, \textit{e.g.}, Yochai Benkler, \textit{The Wealth of Networks} 36 (2006) (describing intellectual property as involving a tradeoff between static and dynamic efficiency); David M. Driesen, \textit{Does Emissions Trading Encourage Innovation?}, 33 Envt’l. L. Rep. (Envtl. L. Inst.) 10094 (2003) (suggesting a similar tension in environmental law); \textit{see generally} Driesen, \textit{supra} note 1, at 210-12 (discussing the problem of competing efficiencies more broadly).
\item Accord, Halpern, \textit{supra} note 88, at 1130 (arguing that impracticability doctrine should provide “some certainty in planning”).
\end{enumerate}
\end{footnotesize}
cases unsatisfying from an efficiency perspective because the judges writing these decisions fail to grapple with the question of how much unexpected cost is too much relative to benefits, the question that should lie at the heart of an effort to make contract law efficient (at least at $t_3$).\(^{116}\) He draws the logical conclusion from this lack of interest in the scale of potential losses as compared with the possible benefits—the courts simply have no interest in economic efficiency.\(^{117}\) Richard Posner, by the way, does not exactly disagree with him. Instead, he argues that an *implicit* economic logic accounts for the cases’ main results, but admits that the “courts have not explicitly characterized the problem” of when to excuse performance as “one of identifying the superior risk bearer.”\(^{118}\) It would be surprising indeed if judges expressing little or no interest in efficient results somehow stumbled upon rules that produced efficient outcomes. Alan Sykes’ conclusion that the courts do not pursue efficient results in these cases (and could not achieve them with any regularity if they tried) has the virtue of aligning judges’ purposes with what the judges say they are doing.\(^{119}\)

We can, however, more easily understand the excuse doctrine in terms of the economic dynamics of change over time. If one sees these doctrines as trying to provide a stable environment for contracting in a world that sometimes upsets parties’ expectations, then the justifications judges actually offer for their decisions become much easier to understand.

Judges seeking to make contracting for future performance a reasonably stable exercise should not excuse performance based on circumstances likely to reoccur in a large number of cases. Hence, the main thrust of an excuse doctrine should be to excuse performance only when *extraordinary circumstances* make performance impossible or extremely difficult.\(^{120}\) Accordingly, in the opinion of the drafters of the Second Restatement of Contracts, judges have made extraordinary circumstances a

\(^{116}\) See Sykes, *supra* note 19, at 75 (lamenting the lack of judicial guidance about how great a cost increase is too much and pointing out that efficiency does not turn solely on the magnitude of cost increases).

\(^{117}\) See id. at 44 (finding legal doctrine “quite insensitive to the economic factors” determining the efficiency of discharge and questioning “the efficiency of the impracticability defense in practice”).

\(^{118}\) See Posner & Rosenfield, *supra* note 60, at 84, 107 (concluding that the excuse doctrines have an “implicit economic logic” but admitting that courts do not explicitly seek to identify superior risk bearers).

\(^{119}\) See Sykes, *supra* note 19, at 93-94 (finding existing doctrine “devoid of any apparent economic foundation,” but suggesting that courts will rarely have sufficient information to craft efficient discharge doctrine).

\(^{120}\) See CORBIN ON CONTRACTS § 1355 (pointing out that “variations in the value of performance . . . are the rule not the exception” and suggesting that therefore parties should “swallow their losses” unless caused by unforeseeable events).
prerequisite for abrogation of contract under the excuse doctrines.\(^{121}\) Ordinary circumstances cannot justify excused performance, not because they cannot render a contract inefficient (ordinary circumstances can do that just as often as extraordinary circumstances), but because they arise too frequently.\(^{122}\)

This focus on extraordinary causes also manifests itself in the courts’ emphasis on foreseeability.\(^{123}\) As a general rule, courts will not discharge contracts based on foreseeable contingencies that arise after contracts are signed making performance difficult.\(^ {124}\) Parties tend to foresee the sorts of contingencies that recur frequently, but often fail to anticipate unusual events.\(^ {125}\) Hence, the foreseeability requirement leads to enforcement in the mine run of cases, confining discharge of contractual obligations to unusual cases.\(^ {126}\)

The focus on foreseeability also seeks stability by discouraging resort to litigation.\(^ {127}\) Hence, courts sometimes justify the foreseeability requirement by stating that foreseeable circumstances do not excuse performance because the party seeking discharge “might have protected himself in his contract.”\(^ {128}\) This expresses a judicial preference for more complete contracts that would allow parties to cope with foreseeable changes in circumstances without resort to the courts.

This focus on the unusual helps explain a central preoccupation of courts in these cases with the nature of the causes of failures to perform.\(^ {129}\)

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\(^{121}\) \textit{Restatement (Second) of Contracts}, introduction to Chapter 11 (emphasizing that the excuse doctrines address the question of when “extraordinary circumstances” justify excusing performance).

\(^{122}\) \textit{See}, e.g., Lloyd v. Murphy, 25 Cal. 2d 48, 57, 153 P.2d 47, 52 (1944) (expressing reluctance to apply impracticability doctrine to a leasehold, because government regulation interfering with particular contemplated land uses is common during wartime).

\(^{123}\) \textit{See} Halpern, \textit{supra} note 86, at 1142 (arguing that the impracticability cases turn “largely on foreseeability”).

\(^{124}\) \textit{See} Waldinger Corp. v. CRS Group Engineers, Inc., 775 F.2d 781, 786 (7th Cir. 1985) (stating that “the impracticability defense . . . turns largely on foreseeability”).

\(^{125}\) The foreseeability test hinges upon what the parties reasonably should have foreseen, not what they actually foresaw. \textit{See} Halpern, \textit{supra} note 88, at 1151. But it is reasonable to expect them to foresee the commonplace rather than the unusual. So, the focus on “objective” foreseeability does not undermine the point that foreseeability implies a focus on the unusual.

\(^{126}\) \textit{See generally} Waldinger, 775 F.2d at 786 (linking foreseeability to an inquiry into whether the occurrence triggering the defense “was so unusual or unforeseen” as to justify a conclusion that this is not what the parties bargained for).

\(^{127}\) \textit{See} Halpern, \textit{supra} note 88, at 1144 (noting that an impracticability defense rarely prevails).


\(^{129}\) \textit{Cf.} Halpern, \textit{supra} note 88, at 1138-39 (arguing that the doctrine should focus on qualitative evaluation of “how different” contractual performance has become in light of
Hence, the courts excuse compliance with a contract to hold a concert when the hall specified in the contract disappears, having burned to the ground, when the person to perform a personal services contract dies, or when a legal change makes performance impossible.\footnote{130}{See Taylor v. Caldwell, 3 B. & S. 826, 122 Eng. Rep. 309 (King’s Bench, 1863) (excusing performance when Surrey Garden and Music Hall burned to the ground before the concert date); Page, supra note 29, at 600-02 (describing cases involving destruction of the subject matter of a contract, death of a party to a contract, and legal changes as “three well settled classes” of impossibility cases).}

By contrast, the failure of a supplier to come through does not ordinarily excuse a seller of goods dependent on the supplier from delivering goods to the buyer.\footnote{131}{See RESTATEMENT (SECOND) OF CONTRACTS, § 261 cmt. e (stating that a party contracting to render performance “that depends on some act of a third party” ordinarily cannot escape its obligation if the third party fails to perform). cf. Selland Pontiac-GMC, Inc. v. King, 384 N.W.2d 490 (Minn Ct. App. 1986) (honoring an escape clause excusing the seller of school buses if its source of supply for chassis failed).}

Suppliers mess up all of the time, and if that excused performance, breach of contract would become routine in a large class of cases involving inefficient performance. This helps explain why Justice Cardozo declines to excuse compliance with a supply contract as a general matter, declaring that obligations will persist though “times turn out to be hard and labor charges high,” but concedes that if the supplier’s facility is destroyed, a defense based on impossibility or impracticability might succeed.\footnote{132}{See Canadian Industrial Alcohol Co. v. Dunbar Molasses Co., 179 N.E. 383, 384-385 (N.Y. 1932) (assuming that destruction of the supplier’s facility would excuse performance, but rejecting excuse based on the supplier’s underproduction).}

Similarly, a supplier’s lack of financial resources does not excuse performance, even though this lack might make performance literally impossible in some cases.\footnote{133}{See La Motte v. Hilgedick, 1992 U.S. App. Lex. 4020, *12 (9th Cir.) (unpublished opinion).}

Creation of a stable environment for managing change can explain the courts’ emphasis on the causes of non-performance, a feature having no obvious relationship to efficiency.\footnote{134}{See Wright, supra note 108, at 2184 (noting that courts rarely excuse performance based on impracticability).}

The courts do, at least occasionally, consider the costliness of performance, but not in a way that suggests any particular concern with economic efficiency. Part two explained that the courts have specifically renounced any allegiance to efficiency by declaring that a contract becoming unprofitable, and therefore presumably not Pareto Optimal, does not justify discharge of contractual obligations. Mainstream decisions adjudicating impracticability claims under the UCC usually pay no attention to supervening events).
the relationship between the promisor’s increased cost and the economic value of the benefit to the promisee, i.e. to the issue of efficiency. Typically, they focus on evaluating the question of whether the increased cost produces an unacceptable economic hardship for the promisor.\footnote{See, e.g., \textit{Eastern Airlines}, 415 F. Supp. at 441 (rejecting claims for impracticability when Gulf Oil cannot show that the increased price of crude oil created any hardship for the company in carrying out a supply contract).} This inquiry more closely resembles the feasibility inquiry in environmental law (which asks whether proposed pollution control requirements might bankrupt a large number of plants) than the cost-benefit analysis associated with economic efficiency’s pursuit.\footnote{See \textit{David M. Driesen, Distributing the Costs of Environmental, Health, and Safety Protection: The Feasibility Principle, Cost-Benefit Analysis, and Regulatory Reform}, 32 BOST. COLL. ENVTL. AFF. L REV. 1, 12 (2005) (describing feasibility analysis as focused on figuring out whether the costs of environmental regulation will produce plant shutdowns and contrasting it with cost-benefit analysis); \textit{ALCOA v. Essex Group, Inc.}, 499 F. Supp. 53, 72 (W.D. Penn. 1980) (stating that impracticability doctrine focuses “distinctly on hardship”). \textit{Cf. Halpern, supra} note 88, at 1156-57 (expressing doubt about the coherence of an emphasis on hardship). I am grateful to Robin Malloy for suggesting that I make this parallel explicit here. This is not to say that courts do this consistently, but rather that this is the central meaning of suggesting that cost renders a contract impracticable, as opposed to undesirable.}

The case usually cited as the font of the commercial impracticability doctrine, \textit{Mineral Park Land Co., v. Howard},\footnote{172 Cal. 289, 156 P. 458 (1916).} for example, reflects some concern about costs, but refutes the idea that economic inefficiency could justify excusing compliance with a clear contract. The \textit{Howard} court released a party from a contract to take all the gravel and earth needed for a bridge construction project from the plaintiff’s land.\footnote{\textit{Howard}, 172 Cal. at 293 (finding no recovery because it was impracticable to remove all of the gravel and earth needed for a bridge).} The defendant discovered that half of the gravel and earth needed lay below the water table and therefore took only about half of the amount contracted for.\footnote{\textit{Id.} at 291 (noting trial court’s finding that the land contained about 101,000 cubic yards of gravel and earth, but that the plaintiff only took about 50,131 cubic yards, the amount above the water table).} The trial court rejected defendant’s argument that taking the gravel below the water table was impracticable, even though it found that removal of that gravel would cost “10 to 12 times as much as the usual cost.”\footnote{\textit{Id.} (noting that the trial court found the defendants obligated take all of the gravel needed for the bridge).} The California Supreme Court reversed, construing the contract as limited to “available” gravel.\footnote{\textit{Id.} at 293 (construing the contract as requiring the taking of “available” gravel and then finding the gravel not reasonably available).} It found the gravel unavailable both because the defendants
“could not take it by ordinary means” (a rationale sounding in extraordinary circumstances) or without “prohibitive cost.”

Although relying in part on an unreasonable cost rationale, even this court disclaimed any allegiance to efficiency, explaining that it did not “mean to intimate” that a mere showing of financial loss would suffice to justify discharge. In other words, lack of Pareto Optimality could not justify discharge, but a combination of some unusual circumstances and extremely high costs could. And Mineral Park Land constitutes something of an outlier in the emphasis it places on the amount of costs.

This inattention to the relationship between costs and benefits suggests that courts not only regularly enforce contracts that no longer exhibit Pareto efficiency, they do so without regard to the question of whether a Pareto inefficient bargain might pass a Kaldor-Hicks efficiency test. By focusing solely upon the costs of compliance, and not the benefits, they eschew consideration of the question of whether an unprofitable, and hence Pareto inefficient contract, might nevertheless prove Kaldor-Hicks efficient, because performance’s benefits to the promisee might outweigh the negative costs to the promisor. This further cements the case for contract law’s inefficiency, showing that it goes beyond enforcement of Pareto inefficient agreements.

Hence, while judges disclaim any intent to excuse inefficient performance under the excuse doctrines, they regularly focus on factors that matter to an effort to promote a reasonably stable environment for contract law. They generally manage contract’s economic dynamics by excusing performance only in exceptional circumstances that make performance ludicrous. The main rule remains that contract law enforces inefficient bargains in order to encourage long-term cooperation through contracts.

**D. Toward an Economic Dynamic Approach**

Although law and economics scholars have not explicitly faced the tension between efficient contracting and inefficient performance, they exhibit acute awareness of the fact that new circumstances can arise that make performance economically inefficient. Indeed, that insight lies at the heart of the whole debate about efficient breach. As a result, the law and economics of contract has, for at least two decades, explicitly included the

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142 Id.

143 Id. (disclaiming any intimation that showing that performing an obligation was “more expensive than . . . anticipated” or would “entail a loss” could justify excusing performance).

144 See Subha Narasimhan, 74 CAL. L. REV. 1123, 1177 n. 143 (1986) (characterizing Mineral Park Lands as a rare exception to the rule that increased costs do not justify discharge).
analysis of transaction costs and imperfect information.\textsuperscript{145} The reality that an assumption of perfect information and zero transaction costs assumes away many of the most interesting problems in the field has forced the law and economics of contract to grapple with institutional law and economics.\textsuperscript{146}

An economic dynamic approach derived from institutional economics holds great promise for further improving our understanding of contract law, and indeed, of law generally.\textsuperscript{147} This approach focuses on analyzing change over time, and views law as establishing temporarily extended societal commitments, rather than as insuring instantaneous efficient individualist transactions.\textsuperscript{148} Economic dynamic analysis involves systematically analyzing how relevant actors behave in response to legal rules under constraints imposed by bounded rationality and limited information.\textsuperscript{149} The bounded rationality concept, borrowed from institutional economics, assumes that actors (including both individuals and institutions) do not pay attention to all potentially relevant information (as per the perfect information assumption), but instead only pay attention to information that their habits and routines make salient.\textsuperscript{150} It follows that

\textsuperscript{145} See Craswell, supra note 7, at 638-40 (discussing articles from the 1970s through the middle 1980s that focus on the transaction costs of renegotiation); see, e.g., Richard Craswell, Property Rules and Liability Rules in Unconscionability and Related Doctrine, 60 U. CHI. L. REV. 1, 64 (1993) (arguing that the choice between property and liability rule protection in a contract case should depend on the “cost of overcoming the impediment to consent that provides the reason for invalidating [a]. . . contract”). Cf. Harold Demsetz, Toward a Theory of Property Rights II: The Competition Between Private and Collective Ownership, 31 J. LEGAL STUD. S653, S657 (2002) (claiming that “[n]eoclassical economists ignored” contractual puzzles, because “discussion of market-clearing prices sets aside” problems stemming from incomplete information and an uncertain future).

\textsuperscript{146} See Craswell, supra note 7, at 634-35 (showing that the problems of efficiency analysis being hopelessly indeterminate led to efforts to take transaction costs into account). Cf. Posner, supra note 4, at 865 (pointing out that if “individuals were rational, with no cognitive limits, and if transaction costs were zero” contract law would be “simple and uninteresting.”)

\textsuperscript{147} I advance the latter argument in a forthcoming book. See DRIESEN, supra note 11 (canvassing the work of scholars in a variety of areas that employ economic dynamic analysis or some of its elements). I cannot defend such a broad claim here and instead focus on defending my claim that the economic dynamic approach has value in the study of contract law.

\textsuperscript{148} See, e.g., Eisenberg, supra note 50, at 1813 (arguing that modern contract law is “in large part dynamic”).

\textsuperscript{149} See DRIESEN, supra note 1, at 7-8 (explaining the concept of bounded rationality and showing how it aids evaluation of how actors respond, or fail to respond, to potentially relevant legal rules).

\textsuperscript{150} See ORGANIZATION THEORY: FROM CHESTER BARNARD TO THE PRESENT AND BEYOND 106-07, 178-79, 185, 188-91 (Oliver Williamson, ed. 1995), MERCURO & MEDENA, supra note 78, at 244-45 (explaining bounded rationality’s importance to the new
actors will not necessarily respond to or even notice all nominally relevant legal incentives.\footnote{151} Economic dynamic analysis demands considering the bounds limiting the rationality of individual actors that legal rules potentially affect in order to analyze how the rules might influence them.\footnote{152} Furthermore, the economic dynamic approach assumes that the law does not provide all relevant incentives influencing action.\footnote{153} At times, non-legal incentives may countervail or otherwise influence response to legal incentives.\footnote{154} Hence, economic dynamic analysis requires consideration of relevant non-legal incentives that may influence response to legal rules.\footnote{155} Thus, economic dynamic analysis eschews the simplistic approach to economic incentives found in many law review articles, which “analyze” economic incentives by simply noting what sort of incentive a law creates, thereby leaving the impression that all (or nearly all actors) will respond in a linear knowledgeable way to law.\footnote{156}

Economic dynamic analysis provides a useful tool for lawyers, because law usually manages change over time. Laws constitute temporarily extended commitments that shape a society’s trajectory.\footnote{157} Even in the contract realm, typified by transactions, law manages change over time, not instantaneous exchange.\footnote{158} Much of the preceding analysis of temporal inconsistency in the law and economics of contract scholarship employs an economic dynamic approach. The focus on change over time that characterizes this approach enables one to see the temporal inconsistencies highlighted above. And a number of analytical moves made rely on the limits of bounded rationality to question whether rules that analysts characterized as efficient would produce the behavior needed for those claims to prove correct.

Nor am I alone in employing economic dynamic analysis to gain

\footnote{151} See DRIESEN supra note 1, at 8 (illustrating this point with the question of whether the “tax on marriage” influences decisions about whether to marry).
\footnote{152} See id. (noting that use of the bounded rationality assumption implies a need to study individual and institutional behavior).
\footnote{153} See id. (calling for analysis of non-legal incentive’s effects on behavior potentially influenced by law).
\footnote{154} Id.
\footnote{155} See id.
\footnote{156} Cf. Jay M. Feinman, The Significance of Contract Theory, 58 U. CINN. L. REV. 1283, 1305-1306 (1990) (explaining that as an empirical matter contract law is not “among the more important elements of the incentive structure” influencing people in business).
\footnote{157} JED RUBENFELD, FREEDOM AND TIME: A THEORY OF CONSTITUTIONAL SELF-GOVERNMENT 85 (2001) (pointing out that law on exists “over time,” because law implies that after a rule is established it is followed).
\footnote{158} Cf. Eisenberg, supra note 3, at 816 (characterizing “discrete contracts” as “almost nonexistent” because contracts generally “create or reflect relationships”).
insight into contract law. Perhaps the best example of the move toward adopting an economic dynamic approach rooted in the tradition of institutional economics involves Ian Ayres and Robert Gertner’s seminal work on default rules in contract law.\textsuperscript{159} Ayres and Gertner begin with the legal fiction that I identified as a staple of the law and economics of contract, the idea that economic analysis should favor the rules that the parties would have agreed upon if they had only thought of it (notice that if they did not, probably transaction costs were too high).\textsuperscript{160} They label rules that apply to fill out incomplete contracts (such as rules about what remedies to employ in the event of non-performance in the absence of an express contractual term on the subject) as default rules.\textsuperscript{161} But they notice that the law does not permit parties to contract around all default rules.\textsuperscript{162} They question the fiction that contract rules simply supply terms that the parties would have wanted by examining these “immutable” default rules—rules that parties may not abrogate.\textsuperscript{163} Examples of immutable default rules include the duty to act in good faith under the UCC and the requirement of consideration to form a valid contract.\textsuperscript{164} In particular, they show that some rules—“penalty” default rules—deliberately seek to provide contractual terms that at least one party does not want in order to encourage the revelation of information leading to more complete contracts than the parties would otherwise agree to.\textsuperscript{165}

This idea of a penalty default rule and the theory Ayres and Gertner develop to guide judicial choice of default rules depend heavily on taking imperfect information and transaction costs seriously. They point out that the transaction cost explanation of contractual incompleteness suggests that courts can minimize contracting costs by choosing rules that the parties would have wanted.

But they go on to conduct an economic dynamic analysis of how these rule choices might influence both parties to a contract.\textsuperscript{166} This yields the conclusion that sometimes choosing a default rule favored by a minority of parties may produce more efficient outcomes than majority default rules.\textsuperscript{167} Furthermore, courts face information deficits and transaction costs that may make determination of the rule that parties would have wanted

\textsuperscript{159} See Ayres & Gertner, supra note 10.
\textsuperscript{160} See id. at 89-90 (explaining that law and economics typically insists that default rules “should be set at what the parties would have wanted.”).
\textsuperscript{161} See id. at 87.
\textsuperscript{162} See id. at 87-88.
\textsuperscript{163} See id.
\textsuperscript{164} Id.
\textsuperscript{165} See id. at 91.
\textsuperscript{166} See generally DRIESEN, supra note 1; DRIESEN, supra note 11.
\textsuperscript{167} See Ayres & Gertner, supra note 10, at 93.
difficult.\textsuperscript{168} In that case, courts may want to establish “penalty” default rules establishing terms of contracts that at least one party does not want, in order to induce the parties to contract explicitly about the issue the default rule addresses.\textsuperscript{169} For example, the UCC voids contracts that do not mention the quantity of goods to be supplied.\textsuperscript{170} Since a contract indicates that parties did not intend a supply of zero goods, this rule penalizes parties for not including a quantity term, thereby forcing them to negotiate about the amount of goods to be sold.\textsuperscript{171} They take incomplete information into account when they argue that the need to encourage parties to reveal information to each other or the court can justify penalty default rules.\textsuperscript{172} Thus, they analyze the dynamics of negotiation that can either preserve or remedy informational asymmetries.

Their analysis also explicitly considers how the bounds of rationality will lead some actors to disregard incentives the law creates. For example, they argue for a penalty default rule requiring that earnest money paid by a buyer as security against breach of a real estate contract go the seller, rather than the real estate broker, in the event of buyer default.\textsuperscript{173} They rationalize this result by pointing out that the seller “may not even consider the issue of how to split the earnest money in the event of default,”\textsuperscript{174} thereby assuming that bounds on the seller’s rationality usually lead her not to consider information about the splitting issue. Instead of assuming that the legal rules governing splitting of earnest money will provide an incentive that the seller will respond to, they recognize that she probably will not know the legal rule governing this issue.\textsuperscript{175}

By contrast, they argue, the broker will likely know the default rule for splitting earnest money.\textsuperscript{176} This observation relies implicitly on the notion that brokers engage in a routine of facilitating multiple real estate transactions that make the question of how to treat earnest money in a failed transaction salient enough for the legal rule to fall, at least fairly often, within the bounds of the brokers’ rationality. Accordingly, the

\textsuperscript{168} Id. at 93 (“If it is costly for courts to determine what the parties would have wanted,” penalty default rules may be appropriate).
\textsuperscript{169} Id.
\textsuperscript{170} U.C.C. § 2-201(1) (1976).
\textsuperscript{171} See Ayres & Gertner, supra note 10, at 96-97.
\textsuperscript{172} See id. at 97.
\textsuperscript{173} See id. at 98-99 (stating that they agree with the courts that award this money to the seller because such an award sets a penalty default rule “against the relatively uninformed party”).
\textsuperscript{174} Id. at 99.
\textsuperscript{175} See id. (noting that the “broker will more likely be informed about the default rule than the seller.”)
\textsuperscript{176} See id.
knowledgeable brokers, unlike the ignorant sellers, will likely respond to the legal incentives that the earnest money splitting rules create. Hence, if the governing rule states that the broker keeps the money, a broker will not raise the issue, because the broker will profit from the seller’s ignorance.\textsuperscript{177} Conversely, if the rule states that the sellers keep the earnest money, the broker may raise the issue, thereby informing the ignorant buyer, in hopes of persuading the buyer to split the proceeds with her.\textsuperscript{178} This analysis depends heavily on analyzing the nature of bounded rationality for particular classes of parties, as economic dynamic theory recommends.

Similarly, Ayres and Gertner argue for a rule not requiring damages when a buyer breaches a promise to buy a retail good relying on the observation that “the customer may not know the default rule for breach.”\textsuperscript{179} Accordingly, a zero damages rule creates a dynamic that may induce the seller, who probably does know the default rules for retail sale promises, to inform the buyer about the rules if she wants to put herself in a position to claim damages.\textsuperscript{180} Thus, Ayres and Gertner implicitly analyze the limits of bounded rationality of particular classes of parties in order to examine the economic dynamics of contractual rules. More generally, Ayres and Gertner display an admirable awareness of the economic dynamics of contracting in the face of bounded rationality when they admonish judges to “consider the possibility that some parties will fail to contract around penalty defaults out of ignorance or oversight.”\textsuperscript{181}

They go on to consider a countervailing incentive that may defeat the incentives a zero damages default rule creates to bargain for a contractual term creating a damage remedy for breach of a promise to buy from the retailer, thereby conforming to the demand of economic dynamic theory that analysis include consideration of relevant non-legal incentives.\textsuperscript{182} They note that in order to obtain the damage remedy envisioned in the legal literature on this problem—lost profits—the seller would have to reveal her markup to the buyer.\textsuperscript{183} They explain that revelation of a mark-up can increase the power of the buyer to obtain a

\textsuperscript{177} Id. (noting that if the default rule favors the broker, the broker will not raise the issue but instead take advantage of the seller’s ignorance).
\textsuperscript{178} Id. (setting the rule “against the broker” will “induce her to raise the issue” if “the efficient contract would allocate some of the earnest money to the seller”).
\textsuperscript{179} Id. at 104.
\textsuperscript{180} \textit{See} id. at 104-05 (arguing that a zero damages rule creates an incentive for the buyer).
\textsuperscript{181} Id. at 128 n. 178.
\textsuperscript{182} \textit{See} id. (discussing the influence of a zero damages rule on negotiations for a damage remedy).
\textsuperscript{183} \textit{See} id. at 105 (the “zero-damages” rule “encourages the retailer to reveal her markup.”)
better price.\textsuperscript{184} This may lead sellers to decline to reveal their mark-ups thereby defeating the zero damages default rule’s incentive to create informed negotiation about damages in the event of a breach.\textsuperscript{185} Thus, Ayres and Gertner analyze not just the incentives law creates, but countervailing economic incentives that may defeat the law’s objectives.

Although Ayres and Gertner employ an economic dynamic analysis in pursuit of efficient rules, once can employ economic dynamic analysis to model fair results.\textsuperscript{186} For this form of analysis enables scholars to predict how rules will influence behavior that can be judged according to either fairness or efficiency norms. The economic dynamic approach provides both a better foundation than the neoclassical model for choosing efficient rules and a superior method for identifying fair rules. It simply offers a better approach than the traditional approach to analyzing legal rules’ effects, regardless of the normative values guiding the analysis.

Thus, we see that contract law’s inefficiency undermines a major justification for a focus on efficient contract law, explains the temporal basis for the inconsistent results the search for efficiency has yielded, and provides a means of understanding excuse doctrines’ emphasis on unusual circumstances. The dynamics of the problem of new circumstances making the apparently efficient contract inefficient, however, have forced legal scholars to abandon neoclassical law and economics in favor of an institutional approach, with some of the best work employing economic dynamic analysis to provide a superior approach to understanding contract law. An economic dynamic approach to this subject shows great promise.

\textbf{Conclusion}

Although contracting parties enact bargains they expect to be efficient, courts regularly enforce inefficient bargains after a party has determined that performance no longer serves her interests. Doing so produces a sensible economic dynamic that helps parties cooperate and manages change over time. This dynamic serves important macroeconomic ends.

This tension between efficient contracting and inefficient performance raises some questions about the value of focusing analysis solely on efficiency. It helps explain law and economics’ inconsistent

\textsuperscript{184} Id. (explaining that sellers “revealing their profits . . . may . . . reduce their bargaining power”)

\textsuperscript{185} Id. (stating that sellers may choose to “take their chances” with a zero damages default “rather than disclose a high markup”).

\textsuperscript{186} See Craswell, supra note 52, at 910 (suggesting that a focus on the economic incentives, consistent with economic dynamic analysis, can be useful whether one pursues efficiency or not).
results as a product of manipulating timeframes in an effort to cope with the dilemma this tension implies. Recognizing contract law as an effort to manage change over time can help explain the exceptions to the rule that courts enforce inefficient contracts, showing that the judicial focus on unusual circumstances allows discharge only where it does not threaten to significantly disrupt future contracting.

All of this commends an understanding of contract law in economic dynamic terms, rather than as an exercise in static efficiency. An emerging mode of institutional economic analysis, economic dynamic analysis, provides a means of understanding change over time and therefore a fine tool for examining contract law’s economic dynamics.