

**“Failure to Appear”:
The Use of the Coase Theorem in Judicial Opinions**

Steven G. Medema*

Version 2.1
September 2019

* Department of Economics, Duke University, USA. Email: steven.medema@duke.edu. The author wishes to thank Nathalie Berta and participants in the session on “Law and Economics” at the 2019 Conference of the European Society for the History of Economic Thought for instructive comments on an earlier version of this paper.

“Failure to Appear”:

The Use of the Coase Theorem in Judicial Opinions

I. Introduction

Recent years have witnessed an awakening of historians of economics to the many roles played by economists and the numerous fora through which economic ideas influence political and social life. The analysis of economists and economics in the “public sphere” has both broadened the history of economics field and, more importantly, shed new light on how and why economists and economic ideas matter (Mata and Medema 2013).

The development of the economic analysis of law—typically referred to simply as “law and economics”¹—during the last third of the twentieth century provided a new entry point for the public-facing side of economics: the courtroom. This is not to say that economics was not a part of legal analysis, courtroom testimony, or judicial opinions prior to the rise of the modern economic analysis of law. Indeed, far from it. The histories of litigation over issues of antitrust and regulation are replete with economic reasoning. But the move to make economic analysis a framework for analyzing, explaining, and rethinking outcomes across the entire spectrum of law has offered a wide range of new opportunities to bring economic thinking to bear on legal issues.

Economics now occupies a place of some prominence in law school curricula and in legal scholarship, the latter to the point where the literature drawing on economic insights in the examination of legal principles is voluminous and, in increasing numbers of instances, unintentional. It has become part of the way in which many legal scholars contemplate legal issues. But what of its practical import? It is all well and good that law professors have added

¹The term “law and economics,” though, has multiple meanings. It is used to refer both to the analysis of legal rules using economic methods rather than traditional legal methods, an approach pioneered by scholars including Gary Becker (1968) Guido Calabresi, (1961; 1970) and Richard Posner (1973), and as the study of the influence of law on economic activity. Ronald Coase, as it happens, had very little interest in the former but a good deal of interest in the latter. See, e.g., Coase (1993, 251) and Kitch (1983, 192).

economic frames of reference to their toolkit, but how has this affected actual law making?

An early study of the judicial opinions authored by Richard Posner (Samuels and Mercurio 1984) cast some doubt on the extent to which economic thinking affected the decisions of the most well-known proponent of applying economic reasoning to the law. But a more recent study by Ash, Chen, and Naidu (2019) has documented the upward trend in law and economics reasoning in judicial opinions over the last several decades, using data on the alumni of the Economics Institutes for Federal Judges, organized by Henry Manne and his successors since the mid-1970s. The present paper takes a more narrow approach, focusing on the use of perhaps the central concept of law and economics, the Coase theorem, in judicial opinions.

II. What is the Coase Theorem?

When economist Ronald Coase explained in “The Problem of Social Cost” (1960) that private action can successfully resolve externality issues, he famously posited a situation in which a rancher’s cattle destroy the crops of a farmer operating on an adjoining parcel of land. Coase demonstrated that if transaction costs are zero the determination of liability for harm caused here is essentially irrelevant: The ultimate allocation of resources to cattle and crop production will be efficient (in the sense of maximizing the value of output) and will not vary with the legal rule in force. Suppose, for example, that the cattle destroy \$500 worth of crops and that the rancher could prevent the damage by installing a fence at a cost of \$200. Fencing is the efficient result here, and the Coase theorem shows that this result will obtain regardless of the direction of legal liability. If the rancher is made liable for harm, he will elect to install the fence at a cost of \$200 rather than paying damages of \$500. If, on the other hand, the farmer is legally responsible for the damage, he has an incentive to bribe the rancher to install the fence, which the rancher would be willing to do for a payment of at least \$200.

In sum, Coase’s 1960 analysis tells us that, if the costs of transacting are zero, legal

rights will ultimately rest with those who value them most highly, that the associated allocation of resources will be efficient (these insights together comprising the theorem's efficiency claim), and that the same allocative outcome will obtain regardless of to whom these rights are initially allocated (the invariance claim). The mechanism for achieving this result in Coase's analysis is *negotiation*, or bargaining. If resources are not in their highest-valued uses, agents will negotiate their way to efficiency, exploiting any available gains from exchange surrounding the externality.

When George Stigler christened Coase's result the "Coase theorem" in 1966, he put Coase's conclusion in an abbreviated form, informing his readers that "The Coase Theorem ... asserts that under perfect competition private and social costs will be equal" (1966, 113). Though Stigler, like Coase, had arrived at this conclusion via the incentive for agents to negotiate, he was quick to connect Coase's result to the theory of competitive markets, suggesting that the Coase theorem's invariance claim is akin to the invariance of sales tax incidence. Market prices, here, adjust to reflect the location and value of rights—and exposure to the exercise of those rights—effectively internalizing externality-related costs.

This "competitive markets" Coase theorem, though seemingly far removed from what Coase was discussing in "The Problem of Social Cost," achieved a good deal of currency in the literature by the mid-1970s, likely due in part to Stigler's formulation of the theorem and Kenneth Arrow's (1969) subsequent discussion of Coase's result in a general equilibrium context. This has left us with two rather different versions of the theorem, one suggesting that negotiation among affected agents will efficiently internalize externalities and another suggesting that competitive markets will do the same. Each of these versions of the Coase theorem has made its way into judicial opinions. The negotiation version, though, appears far more frequently than the competitive markets version, as one might expect given that it is the "textbook" version of the theorem and that most widely employed in the scholarly literature.

There is a good deal of disagreement within the scholarly literature over whether the

Coase theorem, properly conceived, includes both the efficiency and the invariance claims, or the efficiency claim alone—the latter allowing for the possibility that there could be multiple efficient allocations of resources. Commentators also differ in the relative emphasis given to the efficiency and invariance claims. For some, the efficiency of the final allocation of resources is the central issue in play, while for others the key question is whether the assignment of rights has any effect on ultimate outcomes. The particulars of the academic dispute over efficiency and invariance will not concern us here.² It is sufficient to note that, as we shall see below, the judicial opinion literature follows the larger literature on this score, with some judges focused on the attainment of an efficient allocation of resources and others stressing that the choice of legal rule will not affect the ultimate outcome.

III. Why the Coase Theorem?

The Coase theorem is the bedrock principle of modern law and economics—even, it is fair to say, the cornerstone on which much of the economic analysis of law has been constructed. When one thinks in terms of judicial decision making, the theorem’s implications are two. First, it suggests that the judicial decisions do not matter for the ultimate resting place of legal rights if transacting is costless. Once the judge has made his or her decision, rights will migrate to those who value them most highly if the decision has not settled them there in the first instance. A judge inclined to the economic analysis of law, then, will recognize that his or her decision may not determine the final resting place of these rights and can trust the parties to work out a better arrangement post-trial if needed. Second, the theorem provides, in the eyes of some, a justification for use of the efficiency criterion in rendering legal decisions when, as is always the case, transaction costs are positive. The theorem tells us that rights will end up with those who value them most highly if transaction costs do not get in the way. Where transaction

²Medema (2019) provides a discussion of these issues and the extensive literature surrounding them. Of course, there is also a large literature purporting to demonstrate that neither claim can withstand the test of economic logic. This, too, is taken up in Medema (2019), with voluminous references to the related literature.

costs may seem prohibitive, the judge may then place herself in the position of legal-economic engineer and facilitate the result that the agents would have reached themselves if transaction costs did not prevent its attainment.

An examination of the use of the Coase theorem in judicial opinions, then, sheds some light into the extent to which judge perceive the theorem as relevant for the law, as opposed to an interesting (or not) theoretical curiosity. Though the theorem's conditions (Medema 2018) are never strictly satisfied in the real world, its insights are suggestive of the possibilities for efficiency-enhancing post-trial bargaining, and judicial opinions provide us with some evidence of the extent to which judges contemplate this possibility, as well as the extent to which they consider the theorem relevant as a justification for applying the efficiency criterion in rendering a decision on the case at hand.

One should bear in mind that analysis here is in no way suggestive of implications for the extent to which law and economics has influenced judicial decision making. Indeed, there are any number of reasons why an examination of citations to the Coase theorem in judicial opinions is a poor proxy for influence of economic thinking on legal decisions. Our goal here is much more limited—to analyze the extent to which the Coase theorem has been used, and the uses to which it has been put, in the opinion literature as one part of a larger effort to understand the influence of the Coase theorem in economics, law, and other fields.

IV. The Data

The data on references to the Coase theorem in judicial opinions come from searches conducted by the author on “Coase theorem,” “Coase,” and “Problem of Social Cost” in the WestLaw and LexisNexis databases of U.S. Federal and State Court cases. The results were then examined for the use of Coase theorem-type arguments. We define Coase theorem reasoning rather strictly here. For example, the several citations to Coase (1960) that do no more than invoke least-cost avoider arguments in reaching a decision, with Coase (1960) listed

as an accompanying reference, do not qualify.³ Harrison (2012, 24-25), for one, takes a more expansive view. It bears mentioning that only a handful of these opinions mention the theorem by name.⁴ The rest discuss some version of Coase’s result with an accompanying reference to “The Problem of Social Cost.” There are also a significant number of opinions that reference Coase (1959) and Coase (1960) but do not include Coase theorem-type arguments.⁵ Finally, we should note that some judges may have invoked Coase theorem reasoning without naming the theorem or referencing or mentioning Coase, as a result of which our data would understate the true citation count. That said, the legal norm of fulsome citation practices suggests that this is not a significant concern.⁶

Table 1

Decade	Citations in Opinions	Bargaining CT	Competitive Markets CT	CT Type Unclear	Efficiency Claim	Invariance Claim	Efficiency + Invariance
1960s	1	1	0		0	1	
1970s	3	1	2		2	1	
1980s	11	7	1	3	3	4	4
1990s	14	10	2	2	3	5	6
2000s	2	2	0		0	1	1
2010s	5	4	1		2	1	2
Total	36	26	5	5	10	13	13

Data downloaded April 18, 2019

³The least-cost avoider argument holds that liability for harm should be assigned to the agent who could have prevented the harm from occurring at the lowest cost.

⁴A search of the term, “Coase theorem” in WestLaw or LexisNexis turns up a goodly number of cases, but most of the citations are to journal articles using the term in the title (e.g., Kelman 1979; Kahneman, Knetsch and Thaler 1990), with the opinion making no reference to Coase’s result.

⁵Coase (1959) contains Coase’s original statement of the negotiation result that has come to be known as the “Coase theorem.”

⁶Landes and Lahr-Pastor (2011, S397) provide data on Federal Court opinion citations to Coase as compared to fellow economics Nobel laureates Kenneth Arrow, Gary Becker, Paul Samuelson, and George Stigler.

A. Counting Coase Theorems

Our searches of WestLaw and LexisNexis identify 36 cases in which the opinion-authoring judge invokes the Coase theorem, a total that contrasts rather starkly with the more than 4000 articles within the legal scholarly literature that reference the theorem.⁷ A decade-by-decade breakdown is provided in table 1, above. The first mention of the Coase theorem in a court opinion, in *Ira S. Bushey & Sons, Inc. v. U. S.*, occurred in 1968, and citations rose steadily through the 1990s before falling off precipitously in the 2000s. The penultimate section of the paper offers some conjectures, based on part on the discussion that follows, for both the seemingly small number of references to the theorem and the historical pattern that emerges from the data.

The types of cases in which the Coase theorem is referenced run the gamut. Tort, property, and contract disputes feature prominently, as one might expect, and cases feature ship owners versus dry-dock owners, lake users versus a polluter, stock transfers, nuisance and associated damages caused by a feed lot and by coal dust, disputed property boundaries, divorce, union retiree health benefit eligibility, wrongful termination, the appropriate cost basis for the determination of public utility rates, the right of an automobile dealer to relocate his dealership, Environmental Protection Agency regulations, bankruptcy, and copyright in music.

The bargaining version of the Coase theorem is by far the most widely-invoked version, appearing in roughly seventy percent of the opinions citing the theorem. Overt references to the competitive markets version, meanwhile appear in only five opinions, while the version of the theorem to which the judges are referring in the remaining five opinions is unclear. All but one of the citations to the theorem since 2000 have been of the bargaining version variety. This may reflect a more settled sense of among judges that the theorem's proper domain is the bargaining context though, given the small numbers, this outcome is not inconsistent with the larger pattern in our data.

⁷Source: Heinonline, accessed August 10, 2019. This result comes from a search of the term "Coase theorem" and so does not capture discussions of the theorem that do not mention it by name.

The data on the use of the theorem's efficiency and invariance claims reveals that both claims feature prominently in the opinions. Thirteen of the opinions reference both efficiency and invariance, while ten invoke efficiency alone and the remaining thirteen invariance alone. These data suggest that, at the aggregate level, the Coase theorem's efficiency and invariance claims are given relatively equal weight. At the micro level, however, they inform us that some judges see the theorem as more concerned with efficiency (or parties achieving a more mutually beneficial outcome) while others are more attuned to its implication that alternative legal rules are without effect on the allocation of resources.

B. Who is Using the Coase Theorem?

Given the paucity of citations to the Coase theorem in the opinion literature, it is interesting to examine the characteristics of 22 judges who *did* elect to discuss the theorem in their opinions. Some data related to this question appears in table 2, below. More than one-third of the opinions (13 out of 36) referencing the theorem were authored by either Richard Posner or Frank Easterbrook, both of whom served (with Easterbrook continuing to serve) as judges on the U.S. Court of Appeals for the Seventh Circuit. Posner, a professor of law at the University of Chicago Law School prior to his appointment to the bench in 1981, is well known as a founder of the Law and Economics movement.⁸ Easterbrook, who received his J.D. from Chicago in 1973, became a professor at the Law School in 1979 and was appointed to the federal bench in 1985, has likewise been an important player in the development of the field.⁹

⁸ Posner retired from the bench in 2017.

⁹ Both Posner and Easterbrook maintained positions as Senior Lecturers at the University of Chicago Law School following their appointment to the bench.

Table 2

Decade	Citations in Opinions	Posner Opinions	Easterbrook Opinions	Manne Institute Attendee Opinions
1960s	1	-	-	-
1970s	3	-	-	0
1980s	11	5	3	0
1990s	14	3	1	6
2000s	2	0	1	1
2010s	5	0	0	0
Total	36	8	5	7

Data downloaded April 18, 2019

Both Posner and Easterbrook made reference to the Coase theorem relatively early on in their judicial tenures, with Posner’s first reference coming in 1982 and Easterbrook’s in 1987.¹⁰ Each utilized both the bargaining and competitive markets versions of the Coase theorem in their opinions and pointed to the invariant effects of alternative legal rules more so than to their efficiency. What is particularly interesting about this data, though, is the pattern that emerges. More than half of the references by each occurred during the 1980s, and they referenced the theorem only a single time after 1999. We can only conjecture as to the reasons for this, but three possibilities come to mind. First, it may simply be that the cases for which Posner and Easterbrook were assigned to write opinions did not lend themselves to application of the Coase theorem. This seems unlikely, however, as the cases in which they did invoke the theorem are of types that appear regularly before the court. Second, it is possible that, with time, Posner and Easterbrook began to make reference to the ability of parties to “work things out” in Coase theorem-like fashion, either pre-trial or post-trial, sans any reference to Coase—perhaps because the theorem has become such an established part of legal thinking. This too seems unlikely, given the copious and careful referencing that attends judicial writing and the

¹⁰ Judge Posner’s first invocation of the Coase theorem—as it happens, the competitive markets version—came in *Powers v. U.S. Postal Service*, 671 F.2d 1041 (1982), which is referenced in section VI, below.

fact that judges are writing for a broad audience and so would be inclined to back up their assertions with relevant references. A third possibility is that, early on, Posner and Easterbrook, consciously or unconsciously, were attempting to demonstrate the utility of the then relatively new economic approach to law by bringing the theorem to bear in their opinions. The fact that none of these opinions stand or fall based on their use of the Coase theorem might be seen to add weight to this explanation. The felt need to insert economic analysis consistent with but perhaps not ultimately determinative of the decision ultimately reached may, then, have diminished with time.

Of the 23 opinions not authored by Posner or Easterbrook, seven—or nearly one-third—can be identified as the products of judges who had attended one of Henry Manne’s Economics Institutes for Federal Judges, an in-depth discussion of which is provided by Henry Butler (1999).¹¹ These Institutes offered judges an introduction to economic principles “as a practical set of tools for understanding cases” (352). They have been both controversial and popular, with Butler estimating that some 40 percent of sitting federal judges had participated in them by 1990 (352). Alumni include (now) U.S. Supreme Court Justices Ruth Bader Ginsburg and Clarence Thomas. The seven opinions by Institute alumni in our data set were authored by five different individuals,¹² and we are unable to discern whether these opinions were written before or after the judges’ Institute attendance or whether their initial exposure to the Coase theorem came during or prior to this. Ash et al. (2019, 1) have recently provided evidence that attendees at the Manne Institutes subsequently used “more economics language” and “render[ed] more conservative verdicts” than they had prior to this economics exposure. Our data could be interpreted as providing some small evidence consistent of this. Yet, when one considers the proportion of federal judges attending the Manne Institutes, the small

¹¹ Manne was honored, along with Coase, Posner and Guido Calabresi, was one of the “four founders” of law and economics by the American Law and Economics Association at its inaugural meeting in 1991. Our data on Institute attendees (Butler 1999) runs only through 1999, meaning that our count may not capture more recent opinions authored by Institute alumni.

¹² Judge Milton Shadur invoked the theorem in three separate opinions during the 1990s.

number of references to the theorem by Institute alumni suggests that the Institutes did not unleash a torrent of Coase theorem-infused judicial decision making.

V. Envisioning Bargains¹³

We begin our analysis of how judges have used the Coase theorem in their opinions by focusing on the bargaining version of the theorem. As noted above, this is far and away the most widely referenced version of the theorem in the scholarly literature. Given this, and the fact that a large proportion of legal disputes are between two agents, akin to Coase's farmer and cattle rancher, it is no surprise that we find the same in judicial opinions.¹⁴ The theorem's perceived applicability and the purposes for which judges have used it, however, are several.

A. Transaction Costs and the Problematics of Bargaining

The first reference to the theorem in a judicial opinion occurred in *Ira S. Bushey & Sons, Inc. v. U. S.* (1968), a dispute between a dry dock owner (Bushey) and a ship owner (the U.S. government) over liability for property damage, a two-party disagreement of the type contemplated by Coase.¹⁵ The second case, *White Lake Imp. Ass'n v. City of Whitehall* (1970), meanwhile, pitted a local conservation association against the local municipality and a leather company in a dispute over the discharge of municipal and industrial wastes into a local lake—again, a small numbers situation not unlike those found in Coase's illustrations.¹⁶ While one

¹³ Here, and in what follows, citations by judges to Coase's argument in "The Problem of Social Cost" (1960) are sometimes suppressed, but all cases examined here do make such a reference.

¹⁴ It should be noted that not all of the Coase theorem references in the opinion literature go to the resolution of the dispute at hand. For example, Judge Posner's opinion in *Analytica, Inc. v. NPD Research, Inc.* (1983), a suit involving conflict-of-interest in legal representation, brought the theorem to bear in his depiction of one of the background facts of the case. A law firm had been hired to figure out the "cheapest" way of allocating two additional shares of stock to an NPD employee, and Judge Posner cited Coase (1960) when noting that "the right answer would benefit them all." See *Analytica, Inc. v. NPD Research, Inc.*, 708 F.2d 1263 (1983). Here, we should note, Judge Posner's appeal to the theorem here goes no further than to make the basic economic point that there are gains from exchange.

¹⁵ See *Ira S. Bushey & Sons, Inc. v. U. S.*, 398 F.2d 167 (1968).

¹⁶ See *White Lake Imp. Ass'n v. City of Whitehall*, 22 Mich.App. 262 (1970). Interestingly, the opinion in *White Lake* also references Hirshleifer *et al.* (1960) on the economics of water supply, which discusses market-based mechanisms for water allocation.

might expect that those invoking the theorem would do so because they considered it applicable to the facts of the case at hand, that is not uniformly the case, as the data in table 3 indicates, and it is certainly not true of these earliest invocations. Indeed, the courts' opinions in *Bushey* and *White Lake* accepted that efficiency-enhancing negotiations were “theoretically possible,”¹⁷ but the judges expressed little confidence in the prospects for such negotiations, owing to various forms of transaction cost (a term used in *White Lake*), even though the number of parties involved was relatively small.¹⁸ This perceived inapplicability may provide some clue as to the reason for the paucity of references to the theorem over the next five decades.

Table 3

Decade	Citations in Opinions	Realistic	Unrealistic	Not Case-Applicable	May Be Case-Applicable	Applicability Unclear
1960s	1	0	1	0	0	
1970s	3	1	1	0	1	
1980s	11	6	2	0	2	1
1990s	14	6	1	4	3	
2000s	2	0	1	1	0	
2010s	5	2	0	3	0	
Total	36	15	6	8	6	1

Data downloaded April 18, 2019

This sense that Coasean bargains are difficult to consummate in reality is found repeatedly in the opinions referencing the Coase theorem. What changed after *Bushey* and *White Lake*, though, was the seeming seriousness with which the opinions' authors tended to take the theorem. While the references to the theorem in *Bushey* and *White Lake* were more or

¹⁷ *Ira S. Bushey & Sons, Inc. v. U. S.*, 398 F.2d 167, 171n.7 (1968).

¹⁸ See *Ira S. Bushey & Sons, Inc. v. U. S.*, 398 F.2d 167 (1968) and *White Lake Imp. Ass'n v. City of Whitehall*, 22 Mich.App. 262 (1970). Interestingly, the opinion in *White Lake* also references Hirshleifer *et al.* (1960) on the economics of water supply, which discusses market-based mechanisms for water allocation.

less passing references in footnotes to the opinion, the passage of time saw discussions of the theorem move into the body of the opinion, as well as both more extensive explanations of the theorem's mechanics and, in the case of pessimism regarding negotiation possibilities, elaborations of why the opinion's author considered post-trial negotiation to be unlikely.

Judge Burnett's opinion in *Carpenter v. Double R Cattle Co., Inc.* (1983) provided the first full-blown statement of Coase's negation result in the opinion literature. At issue in *Carpenter* was a nuisance caused by a cattle feed lot, with suit being brought against the feed lot by a group of neighboring homeowners. Judge Burnett, writing for the Court, devoted an entire paragraph of his opinion to the theorem. "In theory," he said, "if there were no societal goal other than efficiency, and if there were no impediments to exchanges of property or property rights, individuals pursuing their economic self-interests might reach the most efficient allocation of costs and benefits by means of exchange, without direction by the courts. See Coase, *The Problem of Social Cost*, 3 J.L. & ECON. 1 (1960)." The problem, he continued, is that "the real world is not free from impediments to exchanges ..."—though he was silent on what those "impediments" might be.¹⁹

The court's decision in *Michigan v. U.S. E.P.A.* (2000) was much more specific about the source of transaction costs there, even in a situation set up to facilitate bargaining. *Michigan* was case that involved the states of Michigan and Virginia challenging Environmental Protection Agency (EPA) regulations, including the use of emissions-reduction costs as a criterion for determining emissions reduction mandates. Though this was a *Per Curiam* opinion, the portion of it that is relevant for our purposes was written by Judge Williams, an alumnus of the Economics Institute for Federal Judges. Judge Williams noted, citing Coase, that whether the EPA did nor did not consider costs could well be irrelevant given that the EPA had explicitly sanctioned emissions trading:

Obviously the firms with the highest emission reduction costs will, if permitted by their

¹⁹ *Carpenter v. Double R Cattle Co., Inc.*, 105 Idaho 320, 330-31 (1983).

states, buy up pollution allowances from firms that are granted allowances because they have overcontrolled for NO_x—firms, obviously, with low reduction costs. If transaction costs were zero, the only effect of the initial assignment of cutbacks would be distributional: firms would make only the cheaper cutbacks, but firms with high emission-reduction costs would buy allowances from those with low costs and thereby transfer wealth to them.

However, Judge Williams continued, “transaction costs notoriously are not zero,” adding that “A glance at EPA’s regulations for allowance trading will convince any doubter that transaction costs can safely be expected to be substantial.” Because of this, the states’ proposed interpretation of the statute would cause any given reduction in emissions to “be achieved at considerably higher cost than under the EPA’s reading ... with absolutely no offsetting environmental benefit to the public”—an outcome which led Judge Williams to label the states’ position “extreme.”²⁰

Even when the court has been inclined toward the the more general applicability of the Coase theorem, though, we see a recognition that the circumstance of a particular case may involve significant obstacles to bargaining. The reasons offered in the cases are several. One is the possibility of hold-outs. Consider, for example, Judge Kram’s decision in *UPIC & Co. v. Kinder-Care Learning Centers, Inc.* (1992), the Coase theorem logic in which was cited two years later in *In re Envirodyne Industries, Inc.* (1994).²¹ UPIC & Co. brought suit after Kinder-Care’s failure to repurchase and pay associated interest on notes held by UPIC. Judge Kram pointed out that in cases where “a distressed or nearly bankrupt firm [such as Kinder-Care] seeks to reorganize its financial structure, the incentives among those financially interested in the firm would generally be to contract to the efficient solution and avoid the transaction costs of a bankruptcy proceeding,” as the Coase theorem suggests. Yet, he continued, Section 316(b) of the Trust Indenture Act of 1939 provides certain payment guarantees for bondholders such

²⁰ *Michigan v. U.S. E.P.A.*, 213 F.3d 663, 676 (2000).

²¹ *In re Envirodyne Industries, Inc.*, 174 B.R. 986, 994-95 (1994).

as UPIC, creating a hold-out incentive that is likely to frustrate bargains—e.g., exchanges of bonds for stock or for bonds with different terms. This, in turn, “places the distressed firm under further stress” and makes it more difficult to achieve the type of orderly negotiated settlement and larger firm restructuring that would stave off bankruptcy.²²

Judge Posner makes a similar point about haggling problems in his opinion in *Avitia v. Metropolitan Club of Chicago, Inc.* (1995), a case involving wrongful termination resulting from an employee’s complaint about the failure of the employer to pay overtime wages.²³ The employee, Avitia, sued, seeking reinstatement. Judge Posner noted that reinstatement may be costly here because of friction between the employer and the employee, and the possibility that this could lead to both costly monitoring practices and recurrent litigation, “the industrial equivalent of a failed marriage in a regime of no divorce.” However, he went on to say (citing Coase), “especially in cases in which the entire costs of the equitable remedy [reinstatement] are borne by the employer, the social costs of the remedy may be avoided by corrective transactions.” He then went on to provide an illustration.

Suppose that reinstatement would be worth \$100,000 to the employee but would cost the employer \$150,000 because of a negative effect of reinstatement on the employer’s productivity; in contrast, an award of \$100,000 would cost the employer only \$100,000 while benefiting the employee to the tune of \$100,000. The substitution of front pay for reinstatement would produce a savings in social costs of \$50,000—yet if front pay were unavailable, the employer might buy out the employee’s right of reinstatement, since at any price between \$100,000 and \$150,000 both parties would be made better off by such a buy-out.

But the solution in this case, for Judge Posner, was not so straightforward. Given the acrimony between the parties, he said, transaction costs potentially loom large here. Thus, he concluded,

²² *UPIC & Co. v. Kinder-Care Learning Centers, Inc.*, 793 F.Supp. 448, 453 (1992).

²³ Judge Posner’s first invocation of the Coase theorem—as it happens, the competitive markets version—came in *Powers v. U.S. Postal Service*, 671 F.2d 1041 (1982), which is referenced in section VI, below.

“Front pay may still be the socially preferable form of relief,” as it “avoids the need for a tricky transaction,” and “when it is feasible the judge is not to be faulted for choosing it.”²⁴

Information problems also present “impediments to exchanges” (as Judge Burnett called them). Information issues have received significant play in the scholarly literature on the theorem and are highlighted in Judge Aspen’s opinion in *In re Stotler and Co.* (1992). This case involved a broker’s attempt to recover monies due from the then-bankrupt Stotler, a futures commodity merchant (FCM), bypassing the traditional priority system for paying out bankruptcy claims. Judge Aspen suggested that, in certain circumstances, one might well rely on the ability of agents to negotiate an efficient allocation of risk here. But not in this instance. “Coase’s theorem about contracting around the law’s assignment of risk,” he said, “depends on the free flow of information.” The problem, he continued, is that “Individual futures investors ... face a formidable task in researching the relative solvency, reputation, and success of competing FCMs.” And, because many investors are risk averse, the presence of limited information will cause “a rational investor to err too much on the side of caution.” This, the court found, justified placing the risk in a way that “ensures a more efficient collective response to that risk”—in this case, on the brokers who introduce customers to the FCMs rather than on the customers themselves,²⁵ since the brokers can be expected to have more information about the quality of the various FCMs and are more easily able to pool the risk of FCM bankruptcy than are individual consumers. As such, Judge Aspen said, the broker’s claims should not be satisfied until those of Stotler’s customers had been addressed.

B. Justifying Efficient Legal Rules

Judge Aspen’s opinion in *Stotler* highlights one of the four operational uses of the Coase theorem in judicial reasoning: In some cases where the Coase theorem is not considered operative owing to transaction costs, the theorem has been used as a preliminary to and

²⁴ *Avitia v. Metropolitan Club of Chicago, Inc.*, 49 F.3d 1219, 1232 (1995).

²⁵ *In re Stotler and Co.*, 144 B.R. 385, 393 (1992).

justification for employing the efficiency criterion.²⁶ Indeed, the notion of pursuing efficiency in the choice of legal rules is sometimes described in the scholarly literature as the “normative Coase theorem.”²⁷ In several of the cases in our data set, including *Stotler*, this normative turn involves a move from the Coase theorem to the least-cost avoider rule—a rule more commonly attributed in the scholarly literature to Yale’s Guido Calabresi (1961). This rule, in a nutshell, places liability on the party who could have headed off the damage at the lowest cost.

Justice Robertson’s concurring opinion in *Comet Delta, Inc. v. Pate Stevedore Co. of Pascagoula, Inc.* (1988), which involved damage done by coal dust to rice stored by the plaintiff, provides a nice illustration of the perceived link between the Coase theorem and the least-cost-avoider rule. Though Justice Robertson was silent on the issue of post-trial bargaining and so did not explicitly rule out the possibility, he insisted that “the law’s burden ought fall upon that party which, at zero transaction costs, could have prevented the loss at the least cost.” This use of the Coase theorem, he said, would reveal which party is “the least cost risk bearer, to use the increasingly familiar lingo,” and “that party which, *ex ante*, could have prevented the loss at the least cost should be burdened in law with the risk and consequently the loss.”²⁸ Coase theorem hypotheticals, then, can be used to work backwards, so to speak, to identify the least-cost avoider. Having gone this far, however, Justice Robertson admitted that the court did not have sufficient information to determine the identity of the least-cost avoider in this case and encouraged the parties to present evidence toward that end when the case was reheard in the lower court.

Judge Easterbrook, for his part, encountered no such difficulties when drawing on the Coase theorem to justify the use of the least-cost avoider rule in two cases dealing with alleged violations of the Fair Labor Standards Act (FLSA). Though these opinions—a concurrence in

²⁶ The other operational uses of the theorem are discussed in the following three subsections.

²⁷ There is a second “normative” Coase theorem, and this is treated in section V.D., below.

²⁸ *Comet Delta, Inc. v. Pate Stevedore Co. of Pascagoula, Inc.*, 521 So.2d 857, 862 (1988). Likewise, in *Mountain States Tel. & Tel. Co. v. F.C.C.*, 939 F.2d 1035 (1991), Judge Ginsberg argues that, when transaction costs are “significant,” it would be “irrational to begin with a presumption that does not accurately presage, the proper classification of the expense in the majority of cases.”

Secretary of Labor, U.S. Dept. of Labor v. Lauritzen (1987) and a majority opinion in *Reyes v. Remington Hybrid Seed Co., Inc.* (2007)²⁹—were written two decades apart, they involve strikingly similar logic. Each of cases involved a dispute over whether migrant laborers should be classified as employees of the farms on which they worked, a finding that would determine whether these laborers were entitled to protection under the FLSA. As Judge Easterbrook’s Coase theorem reasoning is identical in both cases, we will content ourselves with a discussion of only one of them—*Reyes*.

Reyes had brought suit against Remington for violation of the FLSA, as the pay and living arrangements provided to Reyes for labor in Remington’s fields were alleged to be far less than what had been agreed upon. Remington, in turn, argued that because Reyes was employed by, and these commitments pay and conditions commitments were made by, a (now insolvent) independent contractor engaged by Remington, they were insulated from liability. Easterbrook, though, noted, citing Coase, that

The rule of liability won’t matter when the number of parties is small and no one is judgment-proof. . . . If an independent contractor is a solvent business, then the workers are protected by that contractor’s incentive to follow the law (for violations could cripple the business) and his ability to pay damages if he does not. The firm that hires the contractor pays up front for the costs of compliance.

Thus, it would not matter whether Remington or the independent contractor was made liable; the costs to Remington would be the same either way, since “it must pay any labor contractor enough to cover the workers’ legal entitlements.” The problem here, Easterbrook found, was that Remington had contracted with a “fly-by-night operator” and now was exposed to additional costs that they could have avoided if they had instead dealt with a reputable contractor or held back enough of the contractor’s payment to ensure proper compensation to the workers. And because Remington was in the best position to ensure compliance with the

²⁹ *Secretary of Labor, U.S. Dept. of Labor v. Lauritzen*, 835 F.2d 1529 (1987); *Reyes v. Remington Hybrid Seed Co., Inc.*, 495 F.3d 403 (2007).

FLSA, Easterbrook said, “treating the principal firm as a separate employer is essential to ensure that the workers’ rights are honored.”³⁰

Judge Cudahy’s concurring opinion in *Bidlack v. Wheelabrator Corp.* (1993) provides a similar road map from the Coase theorem to the deployment of the efficiency criterion. The case involved a dispute over whether retired union employees had a right to lifetime health benefits, a subject not specifically treated in the most recent (and since expired) collective bargaining agreement.³¹ Invoking Coase (1960), Judge Cudahy said,

We should recognize initially that, when those affected by a chosen default rule can easily bargain around it to agree to a mutually beneficial course, the rule choice will generally make little difference to the parties’ actual agreement. ... When bargaining is easy, courts selecting a default rule may properly look past those parties affected by the rule to other advantages or disadvantages a particular rule may entail, such as the costliness of its administration.

The problem, he continued, was that the opportunity for bargaining was long past, given that the plant had been closed. Judge Cudahy’s suggested approach for dealing with the problem involved inferring the result of a Coasean bargain:

When the parties or the situation are such that those affected by the rule cannot bargain around it, the choice of default rule is different; for the rule may, in effect, supply terms to which the parties are bound but to which they have not explicitly agreed. In these circumstances, courts should try to select the default rule that best reflects the course the parties would have taken had they bargained freely.

Here, then, the Coase theorem functions as a justification for the utilization of the efficiency criterion: The enforcement of a damages remedy generates the result that the parties would have arrived at of their own accord in a world free of transaction costs—a result that Judge

³⁰ *Reyes v. Remington Hybrid Seed Co., Inc.*, 495 F.3d 403, 409 (2007).

³¹ The plant governed by the agreement had been shut down.

Cudahy felt pointed to the vesting of lifetime health benefits for Bidlack's employees.³²

The optimism expressed by Justice Robertson, Judge Easterbrook, and Judge Cudahy regarding the ability of judges to help agents find their way to efficiency makes for a marked contrast with the opinion in *Leisnoi, Inc. v. Stratman* (1998), a dispute over sub-surface mining rights on Native lands in Alaska. Here, Judge O'Scannlain provided perhaps the most unusual reference to the Coase theorem found in this literature.³³ Judge O'Scannlain began his theorem-related discussion by pointing out that, "Theoretically, at least, given a world of no transaction costs, economic optimality does not depend on the allocation of a property right (such as the power to authorize mining) to one party or another; the two parties can simply bargain to the optimal solution." He acknowledged that "theory might not survive practice," but refused to move from there to the application of the efficiency criterion, despite an acknowledgment that Congressional policy governing Native lands supported the facilitation of economic growth. Instead, he contended that "the determinations of whether theory prevails and, if not, whether economic growth is maximized by granting the property right to the surface-estate owner, instead of the subsurface-estate owner, *should not be made by the judiciary*" (emphasis added).³⁴ What was his rationale for adopting this position? Judges, he said, "are ill-equipped to hypothesize on the consequences of imperfect information or other impediments to bargaining." Instead, he continued, "Such policy arguments are more properly addressed to legislators or administrators³⁵ ...". Judge O'Scannlain's position here is at odds with Posner's (e.g., 1986, ch. 19) insistence that judges rather than legislators are in the best position to make efficiency-related judgments and, as such somewhat surprising coming from an alumnus of Manne's Economics Institutes for Federal Judges.

The use of Coase theorem logic to ground findings in favor of efficiency promotion

³² *Bidlack v. Wheelabrator Corp.*, 993 F.2d 603, 612 (1993). Ironically, Judge Posner was the author of the majority opinion here and Judge Easterbrook wrote a dissenting opinion. Neither made reference to the Coase theorem.

³³ Judge O'Scannlain was a participant in one of Manne's Economics Institutes for Federal Judges.

³⁴ *Leisnoi, Inc. v. Stratman*, 154 F.3d 1062, 1071 (1998).

³⁵ *Leisnoi, Inc. v. Stratman*, 154 F.3d 1062, 1071 (1998), citing *Chevron*, 467 U.S. at 864, 104 S.Ct. 2778.

would certainly sound familiar to those versed in the basic contours of the economic approach to law. But not so for the concept of fairness. When the fairness criterion is remarked upon within the scholarly literature on Coase theorem, it is typically in reference to the notion that the theorem somehow (and wrongly) privileges efficiency over fairness or to the perceived “unfairness” of relying on the invariance principle. And, in fact, we find this viewpoint reflected in Judge Burnett’s opinion in *Carpenter*, where he notes that reliance on the Coase theorem is constrained both by “impediments to exchange” and “a society which is also concerned with distributive justice.” The goals of efficiency and distributive justice, he said, are “often competing,” because of which “the courts often are the battlegrounds upon which campaigns for efficiency and distributive justice are waged.”³⁶

What may—but should not—surprise the reader, particularly in light of Judge Cudahy’s remarks in *Bidlack*, quoted above, is that the Coase theorem can be used to render a finding grounded in fairness. This logic is seldom remarked upon in the scholarly literature but was taken note of by Judge Swygert in his concurring opinion in *Madison Consulting Group v. State of S.C.* (1985), a case that would determine which state should have jurisdiction over a contracting dispute.³⁷ Judge Swygert reacted to concerns about fairness in the determination of jurisdiction by noting that, “Absent any transaction costs, it would be just as fair, if we can define ‘fair’ to mean ‘efficient,’ to force the plaintiff, not the defendant, to internalize such costs.” Judge Swygert, though, recognized that if efficiency considerations are rendered irrelevant by the Coase theorem, other fairness concerns can justly carry the day: Because “jurisdictional doctrine requires us to focus on fairness to the defendant, he said, “having concluded that fundamental fairness is indifferent as to which party bears the cost, we can

³⁶ *Carpenter v. Double R Cattle Co., Inc.*, 105 Idaho 320, 331 (1983). Judge Burnett argued that the English common law system had placed the larger emphasis on distributive justice, while American law “tempered by the tort-related concept of fault, and the demands of a developing nation placed greater emphasis upon the economic objective of efficiency relative to the objective of distributive justice,” a tilt with which he did not fully agree.

³⁷ On the scholarly literature front, see, e.g., Burrows (1970, 44), Schwab (1989, 1195), and Medema (1999).

hardly conclude that it is fundamentally unfair to place the burden on the defendant.”³⁸

C. Reliance on Post-Trial Bargaining

Though our discussion to this point has focused on perceived impediments to the Coase theorem’s operation, more than half of the opinions invoking the theorem give a reasonable degree of credence to the possibility that it may be operative in the case at hand. Table 3 provides some relevant data. Three of these opinions were written by Judge Posner, the first coming in *Sarnoff v. American Home Products Corp.* (1986), a suit dealing with breach of an employment contract. At issue was a former employee’s alleged violation of a non-compete clause, which caused him to forfeit deferred compensation from his former employer. In his opinion, Judge Posner noted that

it can be argued that under either arrangement, which is to say whatever the initial assignment of rights—whether the employer has the right to prevent the employee from competing or the employee the right to compete but at some previously determined price—the parties, because there are only two of them (so that the costs of transacting should not be prohibitive), will be able to bargain their way to the position that maximizes their joint wealth.

Because of this, said Posner, “the amount of competition should not be affected” by the Court’s decision.³⁹

One finds a similar degree of confidence about the ability of parties to negotiate efficient solutions in Judge Posner’s opinion in *Chrysler Corp. v. Kolosso Auto Sales, Inc.* (1998), a dispute between Chrysler and one of its dealers over the dealer’s desire to relocate the franchise to a location Chrysler considered disadvantageous. Though franchisors previously had an unreviewable right to insist that dealers remain in the location specified in

³⁸ *Madison Consulting Group v. State of S.C.*, 752 F.2d 1193, 1209n.7 (1985).

³⁹ *Sarnoff v. American Home Products Corp.*, 798 F.2d 1075, 1083 (1986). Posner further notes that any non-compete covenant’s value would have been accounted for in the employee’s compensation when the employment arrangement was initially negotiated—another illustration of the Coase theorem at work.

their contract, recent (1993) legislation in the State of Wisconsin allowed dealers to challenge such refusals. Chrysler, though, claimed that this violated the Contracts Clause of Article 1 of the U.S. Constitution. Given that Wisconsin law had for some time been evolving to give dealers more rights against the automakers, the Court found that Chrysler could reasonably have foreseen the possibility of this legal change at the time (1988) that it entered into the dealership contract. But as Judge Posner acknowledged, a finding in favor of Kolosso did not necessarily settle the matter. Chrysler, he wrote,

can pay him [Kolosso] to stay in his existing location, and it presumably will do so if the benefit to it exceeds the cost to him. Kolosso wants to move in order to reduce the cost of the repair and other services that he performs and so make more money on those services, even at the cost of fewer car sales because it is not as good a location for selling cars. Chrysler obviously cares more about the car sales. The parties thus have divergent interests, but they can be expected to negotiate to the solution that maximizes the net benefits of their relationship. See R.H. Coase, "The Problem of Social Cost," 3 *J. Law & Econ.* 1 (1960).⁴⁰

For Judge Posner, this was all very straightforward and even commonplace, as he likened the situation to a landlord who, having a better use for his property, could bribe his tenant to leave.

Interestingly, Judge Posner's opinion in *Walgreen Co. v. Sara Creek Property Co.* (1992) offers a more nuanced and hesitant assessment of the prospects for bargaining, despite what seem to be circumstances similar (in a Coasean bargaining possibilities sense) to *Sarnoff* and *Chrysler*. Walgreen brought suit for breach of contract against its landlord, Sara Creek, and a competitor, Phar-Mor, when the landlord decided to buy out the lease of another tenant and allow Phar-Mor to occupy the space. This put Phar-Mor into direct competition with Walgreens, in violation of Walgreen's lease contract, which said that Sara Creek would not lease space to its competitors. Walgreen sought an injunction that would block lease of the

⁴⁰ *Chrysler Corp. v. Kolosso Auto Sales, Inc.*, 148 F.3d 892, 894 (1998).

space to Phar-Mor.

Here, as in *Sarnoff* and *Chrysler*, Posner pointed to the expectation that the parties would bargain around any judicial decision found to be inefficient, again citing Coase as his authority. But he then pulled back, raising the prospect that an the injunction sought by Walgreen would create “the situation that economists call ‘bilateral monopoly,’ in which two parties can deal only with each other.” In such a situation, Posner noted, upholding the injunction granted by the lower court would present to the following scenario:

Walgreen can “sell” its injunctive right only to Sara Creek, and Sara Creek can “buy” Walgreen’s surrender of its right to enjoin the leasing of the anchor tenant’s space to Phar–Mor only from Walgreen. The lack of alternatives in bilateral monopoly creates a bargaining range, and the costs of negotiating to a point within that range may be high.

Judge Posner went on to provide a hypothetical example:

Suppose the cost to Walgreen of facing the competition of Phar–Mor at the Southgate Mall would be \$1 million, and the benefit to Sara Creek of leasing to Phar–Mor would be \$2 million. Then at any price between those figures for a waiver of Walgreen’s injunctive right both parties would be better off, and we expect parties to bargain around a judicial assignment of legal rights if the assignment is inefficient.

The problem, he continued, is that,

each of the parties would like to engross as much of the bargaining range as possible—Walgreen to press the price toward \$2 million, Sara Creek to depress it toward \$1 million. With so much at stake, both parties will have an incentive to devote substantial resources of time and money to the negotiation process. The process may even break down, the injunction will have brought about an inefficient result.

Thus, Judge Posner concluded, “All these are in one form or another costs of the injunctive process that can be avoided by substituting damages.”⁴¹

⁴¹ Walgreen Co. v. Sara Creek Property Co., B.V., 966 F.2d 273, 276 (1992).

It is not clear why Judge Posner saw fit to invoke potential the bilateral for monopoly problems here but not in *Sarnoff* or *Chrysler* and, as *Walgreen* was argued in between these other cases, it would not appear that we could credit an “evolution” in his views. Somewhat ironically, Judge Posner’s attitude here is more in line with Paul Samuelson’s view of Coase’s result than with what one might call the “Chicago view.” Writing in 1963, Samuelson tells us that,

The view that R. Coase has shown that externalities—like smoke nuisances—are not a logical blow to the Invisible Hand and do not call for coercive interference with laissez-faire is not mine. I do not know that it is Coase’s. But if it had not been expressed by someone, I would not be mentioning it here. Unconstrained self-interest will in such cases lead to the insoluble bilateral monopoly problem with all its indeterminacies and non-optimalities. (Samuelson 1963, 132)⁴²

But for Judge Posner, at least, the specter of bilateral monopoly problems was not sufficient to completely discount Coasean bargaining and so reverse the injunction. He noted that one benefit of an injunction is that it, by facilitating negotiation, allows the parties themselves, rather than the court, to determine the relevant costs. And, he said,

a premise of our free-market system, and the lesson of experience here and abroad as well, is that prices are more accurately determined by the market than by government. A battle of experts is a less reliable method of determining the actual cost of Walgreen of facing new competition than negotiations between Walgreen and Sara Creek over the price at which Walgreen would feel adequately compensated for having to face that competition.⁴³

In the end, the court determined that an evaluation of the relevant benefits and costs weighed in favor of upholding the injunction granted by the lower court and allowing the parties themselves to work out any possible efficiency-enhancing solution.

⁴² See also Samuelson (1967, 36n.18).

⁴³ *Walgreen Co. v. Sara Creek Property Co.*, B.V., 966 F.2d 273, 275-76 (1992).

Judge Posner, though, was not alone in prescribing Coasean bargains as a mechanism for dealing with inefficiencies or other problems caused by a court's decisions. The situation in *Clanton v. Hathorn*, a 1992 Mississippi property boundary dispute between adjoining landowners was deemed amenable to Coasean bargaining by Justice Robertson of the State of Mississippi Supreme Court. The dispute concerned a set of boundary encroachments totaling perhaps one-eighth of an acre between parcels hundreds of times that size, including a driveway laid down by Clanton that resulted in an encroachment "about the size of a pickup truck." Justice Robertson found that "Several practical remedies seem obvious," including having Clanton "slightly re-route his driveway." However, he continued,

Once the cost of such a re-routing is estimated, an even more sensible suggestion seems that Hathorn should sell and Clanton should buy this patch of earth for something between what it would cost Clanton to remove and rebuild his driveway and the income Hathorn might expect of it were it productive farm square footage. It seems unlikely rational wealth maximizers would ignore such a course. *See Coase, The Problem of Social Costs*, 3 J L. & Econ. 1 (1960), and progeny."⁴⁴

We witness a similar degree of Coase-theorem-related optimism in *Sands v. Menard* (2010), which saw the theorem invoked in a dispute over employee reinstatement rather similar to that in *Avitia*. The Wisconsin Supreme Court denied Sands, an attorney, reinstatement on the grounds that friction between the parties would prevent her from fulfilling her ethical obligation to her client-employer. Chief Justice Shirley Abrahamson drew on Judge Posner's use of the Coase theorem in *Avitia* when offering a strong dissent from the court's decision. But where Judge Posner was skeptical of bargaining possibilities, Justice Abrahamson was effusively optimistic. The majority, she said, failed to acknowledge that, "If the reinstatement award stands, and if the parties truly view reinstatement as untenable and mutually undesirable, then rather than enter a situation where, in the majority's view, an ethical violation is likely to

⁴⁴ *Clanton v. Hathorn*, 600 So.2d 963, 966n.3 (1992).

occur, the parties could simply negotiate a settlement that avoids Sands' actual return to Menard." Citing Judge Posner's invocation of Coase, she went on to note that "Courts and commentators alike have recognized that parties are free to reach a more efficient or desirable result by negotiating an alternative solution to a court-imposed remedy." The majority's concerns, then, were unfounded because "if the parties could not live with reinstatement, they were free to negotiate another result."⁴⁵ Indeed, she said, "as a practical matter ... what was at stake was likely just a question of putting a price tag on the reinstatement award,"⁴⁶ a function which Justice Abrahamson believed the Coase theorem's mechanics would accomplish quite nicely.

D. Facilitating Coasean Bargains: The Other "Normative" Coase Theorem

One source of the transaction costs that often frustrate Coasean bargains is legal rules themselves. Some rules are more likely than others to encourage or discourage bargaining, whether post-trial or, in the case of future disputes, in ways that would deter potential lawsuits. The idea that judges should make decisions that will minimize transaction costs and so facilitate post-trial bargaining is the second version of the so-called "normative Coase theorem" and is evidenced in *Town of Ellettsville v. DeSpirito* (2018), a case involving the relocation of a sewer line easement. Here, Justice Slaughter of the Supreme Court of Indiana pointed out that in reaching a decision, the court could rely on a long-standing Indiana common-law rule that prevents the modification of easements without the agreement of all parties, or on the *Restatement of Property*, which allows the servient estate holder to take unilateral steps to relocate the easement.

The efficiency prospects pointed to by the Coase theorem were one of four reasons

⁴⁵ *Sands v. Menard*, 2010 WI 96, P98.

⁴⁶ *Sands v. Menard*, 2010 WI 96, P98n.12. In light of Justice Abrahamson's more optimistic view of Coase theorem-type negotiations here as compared to Posner, it is interesting to note that she was appointed to the court by a Democratic governor.

cited by the Court when deciding in favor of the common-law rule.⁴⁷ “A final reason for adhering to the common-law rule,” Judge Slaughter noted, “is the economic reality that property owners with easement disputes often will bargain extralegally—meaning they will contract around existing rules.” As he went on to acknowledge,

A potential problem with extralegal bargaining is that if transaction costs are more than *de minimis*, the parties may be deterred from bargaining to the optimal, so-called “Pareto-efficient” outcome—where it is impossible to enhance the welfare of one party without making another worse off. This is the Coase Theorem in its simplest form. As Professor Coase acknowledged, transaction costs often prevent extralegal bargaining and frustrate optimal outcomes. R.H. Coase, *The Problem of Social Cost*, 3 J. Law & Econ. 1 (1960). Because transactions costs are usually more than negligible, we seek the rule that minimizes bargaining costs and encourages parties to attain a more efficient outcome.

The common-law approach, Judge Slaughter asserted, “forces the parties to cooperate from the outset,” providing a “clear rule” that would facilitate contracting. By allowing one party to take unilateral action to relocate the easement, in contrast, application of the Restatement approach raises the prospect that this party will incur sunk costs which make negotiation more difficult later and so interfere with efficiency. The effect would be to “make bargaining costlier and deter the most efficient use of resources.” In part because “the common-law rule encourages bargaining at a lower cost than the Restatement approach” and the Court considered efficiency an important consideration here, it elected to affirm the application of Indiana’s common-law rule.⁴⁸

U.S. District Court Judge Harry S. Mattice, Jr. Made a similar Coase theorem-related argument in *Walker v. AMVAC Chemical Corporation* (2018) when ruling on a motion to

⁴⁷ The other reasons were “settling expectations,” “minimizing litigation,” and “avoiding judicial takings” of private property.

⁴⁸ *Town of Ellettsville v. DeSpirito*, 111 N.E.3d 987, 996 (2018).

transfer jurisdiction in a patent dispute. Judge Mattice noted, citing Coase, that “If transaction costs are zero or inconsequential, parties will reach the most efficient outcomes that on net benefit the rest of society.”⁴⁹ But high transaction costs, he cautioned, can prevent these efficiency-enhancing transactions, and a change of jurisdiction that makes it significantly more costly for one party to litigate the dispute will have such an effect, particularly when, as in the present case, one of the parties (Walker) has far less financial wherewithal than the other. This, in turn, can lead better-resourced parties to use the specification of venue to their benefit, taking advantage of the weaker parties—in this case, to ward off suits for breach of contract over intellectual property. Denying such venue changes, then, becomes a vehicle for reducing transaction costs and facilitating bargaining.

Sometimes, however, that which will facilitate bargaining is in the eyes of the beholder. In one of his three invocations of the Coase theorem, this in *Coltman v. C.I.R.* (1992), Judge Shadur added a concluding note that went to the implication of the Court’s decision disallowing the tax deductibility of payments to a spouse during a period of separation (that is, prior to divorce). The majority, he said, had established a “bright-line rule” about deductibility, and a clear rule such as this one,

affords a real advantage to taxpayers, who can negotiate (or who can obtain judicial rulings as to) their financial arrangements during the unpleasantness of the pre-divorce-decree period, with full knowledge as to whether they are dealing in pre-tax or post-tax dollars. It provides a classic illustration of the Coase Theorem, which has earned Professor Ronald Coase a long-belated but much-deserved Nobel Prize: So long as the rule of law is known when parties act, the ultimate economic result is the same no matter which way the law has resolved the issue. That of course provides cold comfort for Bertram, who has had the misfortune to negotiate without that degree of legal

⁴⁹ *Walker v. AMVAC Chemical Corporation Slip Copy* (2018) at 12.

certainty.⁵⁰

Judge Shadur’s optimism here is in stark contrast with the attitude of Judge Holmes in *Armstrong v. C.I.R.* (2012), another divorce-related tax case. Here, the petitioner’s ex-wife had failed to provide him with an executed tax form transferring to him the dependency exemption for their child, as she had been ordered to do by an arbitrator. The petitioner claimed the deduction anyway, and the IRS rejected it, presenting him with both the resulting tax bill and a fine. When the petitioner sued the IRS, the court upheld the IRS’s position, but Judge Holmes offered a lengthy dissent, arguing that the documentation of dependency submitted by Armstrong should have been sufficient, given the delinquency of his ex-wife and, in doing so, invoked the Coase theorem: “It is one of the great theorems of law,” said Judge Holmes, “that if all sides are rational actors with perfect knowledge and zero transaction costs, the allocation of resources—even including exemptions, child tax credits, and the like—would be the same regardless of the rules we choose. *See* Ronald H. Coase, ‘The Problem of Social Cost’, 3 J.L. & Econ. 1 (1960).” But even the great theorems are not universally applicable. As Holmes aptly noted, “in our fallen world, there are few stages on which rational actors are more outpeopled by the children of wrath than in domestic-relations law,” meaning that “bright line” rules in that context are not necessarily beneficial and could even result in “more gruesome spectacles of contempt and threats of jail.”⁵¹

⁵⁰ *Coltman v. C.I.R.*, 980 F.2d 1134, 1136-37 (1992). The court’s decision in *National Broadcasting Co., Inc. v. Copyright Royalty Tribunal* (1988) sounds a similar note, expressing great confidence in the effect of settled legal rule in promoting bargaining. As Judge Silberman noted in his opinion, “Now that the distribution rule is in place, parties can organize their affairs to minimize ... litigation cost.” Quoting a previous court ruling, Judge Silberman pointed out that, these rules “will not displace the operation of relevant market forces in the future. Now that that Tribunal’s methods are known, for example, broadcasters will bargain more knowledgeably with sports teams about telecasts of sports events, and representatives of music, programs, and movies may contract accordingly with television broadcasters”—citing Coase (1960) as further evidence for this claim. *National Broadcasting Co., Inc. v. Copyright Royalty Tribunal*, 848 F.2d 1289 (1988).

⁵¹ *Armstrong v. C.I.R.*, 139 T.C. No. 18 (2012) at 507. On the role of transaction costs in divorce situations, see the discussion in Medema (2019) and accompanying references.

E. What is, is Efficient (or Not)

A final use to which the Coase theorem has been put is to legitimize existing arrangements, such as contracts. The idea here is that if agents have worked out a contract or other arrangement under conditions that are perceived to conform sufficiently to the Coase theorem's dictates, the arrangement can be presumed to be efficient and so should be enforced. We find this logic at work in Judge Easterbrook's opinion in *Edward Hines Lumber Co. v. Vulcan Materials Co.* (1988), a case involving liability for the cost of removing chemical contaminants from a wood treatment facility. Hines was the operator of the facility, which was built for it by Osmose Wood Preserving, and Osmose also supplied the treatment chemicals.⁵² Hines sought to recover the costs of an E.P.A.-mandated Superfund clean-up from Osmose.

In finding against Hines, Judge Easterbrook argued that, "The desire of operators to minimize their own liability will lead them to pay close attention to their designers and suppliers. When they lack the expertise to supervise closely, they can induce their contracting partners to take care by insisting on warranties and indemnification." If the parties can anticipate the relevant risks—as Hines and Osmose certainly could, he said—Coase's analysis tells us that "the outcome of this process is not fundamentally different from the outcome produced by a rule of liability"—that is, the agreement should be expected to reflect an efficient allocation of risk. And, Easterbrook noted, the Superfund Act makes the "owner or operator' of the facility" liable for clean-up costs, making the court's decision straightforward:

Large potential obligations concentrate the mind wonderfully, leading the owner-operator to assign duties and liabilities by contract to those who can best take precautions. Hines had a warranty and could have bargained for indemnification; if it did not, or if it chose not to enforce the rights it had, Hines has only itself to blame.⁵³

But this logic cuts both ways, offering a justification for a judgment that looks beyond the contract, as we can see in Judge Cudahy's argument in *Bidlack*. An efficiency presumption

⁵² Vulcan Materials Company, and other defendant, was by this time defunct.

⁵³ *Edward Hines Lumber Co. v. Vulcan Materials Co.*, 861 F.2d 155, 158-59 (1988).

in favor of negotiated contracts, Judge Cudahy, said, assumes “that parties to all collective bargaining agreements were negotiating under the same assumptions.” In reality, however, the lack of a clear judicially imposed default rule that would serve as a backdrop for bargaining means that the parties may have bargained under different presumptions about the default rule applicable to their situation. As a result, he concluded, employing “strong rules,” such as the enforcement of contracts according to their terms, to govern disputes may actually lead to results that are contrary to what the parties intended. Application of a weaker default rule, in contrast, provides a rule “around which the parties can effectively bargain” prospectively—as with a strong rule—while still preserving the ability to correct inefficiencies ex post by allowing the parties to present “extrinsic evidence of actual intent.”⁵⁴

VI. The Competitive Markets Coase Theorem

Though the opinions invoking a competitive markets version of the Coase theorem are much smaller in number than those grounded in bargaining, the form of those invocations is decidedly more affirmative than those associated with the negotiation version of the theorem.

The first opinion referencing of the Coase theorem in a competitive markets context came in 1974, in *Union Oil v. Oppen*. The subject of *Union Oil* was a suit brought by commercial fishermen against an oil company for damage done by an oil spill. In the building a case that Union Oil had violated a duty of care owed to Oppen, Judge Sneed (who later attended the Economics Institute for Federal Judges) pointed out that economic analysis points in the same direction as the legal precedents. Citing both Calabresi (1970) and Coase (1960), Judge Sneed’s opinion took note of the nascent economic approach in the scholarly literature of law, which suggested that liability in tort should be apportioned to achieve “an optimum allocation of resources.” This outcome, he said, is that which, “in theory ... would be achieved by a perfect market system.” Achieving it, he continued, “requires the court to fix the identity

⁵⁴ *Bidlack v. Wheelabrator Corp.*, 993 F.2d 603, 612-13 (1993).

of the party who can avoid the costs most cheaply”—a determination that will then control liability.⁵⁵

The following year witnessed a reference to the competitive markets Coase theorem in the one U.S. Supreme Court case to take up Coase’s result, *United Housing Foundation, Inc. v. Forman* (1975)—interestingly, only the fourth opinion to cite Coase’s result. All the more interesting is the source of the citation—Justice William J. Brennan, who became well known as the leader of the Court’s liberal wing, and whose dissent here was joined by Justices William O. Douglas and Byron White. The Court’s majority determined that shares of stock in a cooperative housing project were not “securities” in the legal sense because they offered the stocks’ owners the right to acquire low-cost, subsidized housing rather than paying out profits. Brennan pointed out in his dissent, though, that the distinction here is simply one between “money saved” and “money earned.” Citing Coase, Brennan said that the court’s reasoning “must surprise knowledgeable economists ... Not only would simple common sense teach that the two are the same, but a more sophisticated economic analysis also compels the conclusion that in a practical world there is no difference between the two forms of income.” Coase theorem reasoning, then, suggested to Brennan that these shares of stock are, indeed, “securities.”⁵⁶ Making this all the more interesting is that, in support of his claim, Justice Brennan cited Paul Samuelson alongside Coase to support his assertion—in this case, the 1973 edition of his classic textbook, *Economics* (1973).⁵⁷ This finding would doubtless have come as a surprise to Samuelson (1963; 1995), who made Coase’s result the subject of scathing criticism.⁵⁸

Judge Tharp’s recent opinion in *Sheridan v. IHeartMedia, Inc.* (2017) sounded a

⁵⁵ *Union Oil Co. v. Oppen*, 501 F.2d 558, 569 (1974). Judge Sneed, we should note, did not consider the determination of the least-cost avoider in this case to be a straightforward process.

⁵⁶ *United Housing Foundation v. Forman*, 421 U.S. 837, 863-64 (1975).

⁵⁷ *United Housing Foundation v. Forman*, 421 U.S. 837, 864n.3 (1975). It bears noting that Samuelson’s textbook did not mention the Coase theorem until the 1990s, meaning that Brennan—or his law clerk(s)—were referencing two different versions of what one might call an economic “irrelevance result.”

⁵⁸ Samuelson, though, considered Coase’s result a proposition in bargaining and so subject to the associated indeterminacies and inefficiencies.

similar note regarding the implications of the Coase theorem for the efficacy of markets. Sheridan alleged copyright infringement based on iHeart’s failure to pay royalties on music played on their stations. Noting the long history of broadcasters not paying such royalties, Judge Tharp pointed out, citing Coase, that “Private parties routinely order their transactions to adjust to legal rules” and that this case provided “a perfect example.” The reality, he said, is that “an alternative compensation scheme evolved in which consumers paid prices to record companies high enough to incentivize continued artistic creation but low enough that public performance of the recordings fostered, rather than eliminated, the market for the recordings.” The result, he said, has been anything but “draconian,” as Sheridan claimed, instead producing “relatively high levels of contentment for all parties” as the radio play brought free advertising for the recording industry and boosted sales in doing so.⁵⁹

The intervening decades have witnessed several appeals, including three by Judge Posner and one by Judge Easterbrook, to the competitive markets version of the Coase theorem or to similar market-like processes, and in a variety of contexts. Two of these opinions have suggested that ordinances which attempt to empower tenants or redistribute income to them, such as rules governing lease termination, will be reflected in the rents charged by landlords, with “no net saving to the tenant in the long run.”⁶⁰ Similar Coase theorem dynamics are said to be at work in the adjustment of wages to take account of the risk of workplace injuries,⁶¹ bankruptcy-related debt,⁶² the supply of credit reports,⁶³ and the question of whether tobacco companies should be liable for health-care costs related to smoking.⁶⁴ In the last instance, welfare benefits funds and health insurance companies brought suit against tobacco companies to recover costs of providing health benefits to smokers. One argument made in support of

⁵⁹ *Sheridan v. iHeartMedia, Inc.*, 255 F.Supp.3d 767, 773 (2017).

⁶⁰ *Powers v. U.S. Postal Service*, 671 F.2d 1041, 1044 (1982). See also *Chicago Bd. of Realtors, Inc. v. City of Chicago*, 819 F.2d 732, 742 (1987).

⁶¹ *McMunn v. Hertz Equipment Rental Corp.*, 791 F.2d 88, 92-93 (1986).

⁶² *In re Boodrow*, 126 F.3d 43, 60n.9 (1997).

⁶³ *Kay v. First Continental Trading, Inc.*, Not Reported in F.Supp. (1997).

⁶⁴ *International Broth. of Teamsters, Local 734 Health and Welfare Trust Fund v. Philip Morris Inc.*, 196 F.3d 818, 824-25 (1999).

recovery was that this would “ensure that tobacco companies rather than smokers pay for the costs of [smoking-related] illness.” Easterbrook found this unconvincing. Citing Coase, he suggested that, “If the tobacco companies must supply insurance with every pack, then the price of cigarettes will rise by the cost of that insurance ...; smokers still bear the costs in the end.” To illustrate this, he offered a simple numerical example: “A pack of cigarettes that costs \$1 and causes a deferred medical bill of \$2 costs the smoker \$3 in all; changing the price to \$3 with no medical bill ... does not affect the real price and therefore will not alter behavior unless consumers misunderstand what they are getting for their money.”

The common theme here is the belief that the market will tend to account for relevant benefits and costs and do so in invariant fashion by, as Judge Shadur put it, “the inexorable operation of the Coase theorem,”⁶⁵ regardless of what judges decide. While Judge Posner suggested that compensation may not always adequately compensate for workplace injury risk, owing to “lack of information or other frictions,”⁶⁶ Judge Shadur called the adjustment of prices in this way to account for risk “a prime illustration of the operation of the Coase Theorem, whose authorship by Professor Ronald Coase has brought him a richly-deserved though too-long-delayed Nobel Prize in economics.”⁶⁷

VII. Post-Trial Bargaining in the Real World

The affirmative invocation by judges of the negotiation version of the Coase theorem presumes that the parties to the dispute will indeed engage in post-trial bargaining, as contemplated by the theorem, if the court’s decision allocates rights (and thus resources) inefficiently. Of course, the official record of these disputes typically ends with the judicial opinion, making it difficult to determine whether the contemplated negotiations actually took place.

⁶⁵ *In re Boodrow*, 126 F.3d 43, 60n.9 (1997).

⁶⁶ *McMunn v. Hertz Equipment Rental Corp.*, 791 F.2d 88, 93 (1986).

⁶⁷ *Kay v. First Continental Trading, Inc.*, Not Reported in F.Supp. (1997). Shadur’s interest in implying the Coase theorem—he cited it in three different opinions—is reinforced by the fact that opinion here is simply a three-paragraph order denying a motion.

Though Coase referenced several nineteenth-century legal cases and provided hypothetical discussions of how negotiation might play out (Coase 1960, 8-15), no attempt was made by Coase—or by anyone else—to assess the extent and results of post-trial Coasean bargaining until Farnsworth’s (1999) study of the subject. Farnsworth examined post-judgment behavior in twenty nuisance cases that had fact patterns similar to the cases discussed by Coase, appeared to involve low transaction costs, and were resolved with the award of a property right to one side or the other. He then contacted the attorneys of record, each of whom reported that there were *no* attempts at post-trial bargaining in the cases in question. Nor, Farnsworth reports, did these lawyers think that the bargaining situation would have been any different if the court’s decision had gone in the opposite direction—a fact that is important in that one objection to an inference against the Coase theorem would be that the judges had assigned rights efficiently in the first place, ruling out the need for bargaining (1999, 384). The lawyers ascribed the failure to bargain to “acrimony between the parties” (an issue that, as we have seen, was highlighted in the opinions in *Avitia* and *Armstrong*) and to the parties’ unwillingness to trade off rights to be free from nuisance for cash (1999, 384)—the latter of which, Farnsworth notes, is suggestive of, but may be more deeply rooted than, an endowment effect (1999, 396).

The lack of bargaining identified by Farnsworth makes for an interesting contrast with the extensive experimental “testing” of the Coase theorem, a literature which reveals a very strong propensity for agents to bargain to efficiency-enhancing agreements.⁶⁸ How might we reconcile the failure to bargain in the real world with the results of these laboratory experiments? One possibility, building on Farnsworth’s (1999, 406-407) suggestion that acrimony could be considered a form of transaction cost, is that the laboratory environment does not capture important negotiation-impeding aspects of real-world legal disputes. A second possibility, suggested by Jolls, Sunstein, and Thaler (1998, 1499-1501), is that this failure to

⁶⁸ See, for example, the overview of this literature in Medema (2019).

engage in post-trial bargaining provides further evidence for the presence of endowment effects, despite Farnsworth's qualification. Posner (1998, 1571), responding to Jolls et al., offers still another possibility—that the courts may have assigned rights efficiently in the first place, meaning that no negotiation was necessary, Farnsworth's suggestion to the contrary notwithstanding.⁶⁹ A final possibility is that the economic approach to the problem simply gets it wrong as respects these untidy real-world scenarios—that agents exhibit neither the strong rationality of economic theory nor the “work things out” gain-seeking described by Coase in many of the situations to which the theorem's insights may seem relevant. Some further insight into these issues can be found in the application of the theorem to messy world of divorce.⁷⁰

VIII. Why the Paucity of Citations?

Given that the Coase theorem has been cited in more than 4000 law review articles, the paucity of citations to the theorem in the legal literature may seem surprising, as may the downward trend since the year 2000. The latter result is particularly eye-catching. One would expect the increasing prominence of economic thinking in law school curricula over the last several decades to be reflected in an upward trend in citations to the theorem in judicial opinions as individuals receiving their legal educations during this period made their way into the judiciary. One would expect a similar effect from the long-running Economics Institutes for Federal Judges, developed by Henry Manne in the 1970s and continuing today under the auspices of George Mason University's Antonin Scalia Law School, particularly given that, as of 1990, roughly forty percent of U.S. Federal Court judges who participated in one of these institutes (Butler 1999, 352) and so had been exposed to the Coase theorem.

It may be that the data from the 1980s and 1990s constitute an aberration, one attributable largely to Judges Posner and Easterbrook. Posner was appointed to the federal

⁶⁹ Posner (1998) also notes that Farnsworth's sample size is too small for the results to be statistically significant and offers a transaction costs-based argument for why his results vindicate rationality.

⁷⁰ See the discussion of *Coltman* and *Armstrong*, above, as well as that of the scholarly literature on the Coase theorem and divorce law treated in Medema (2019).

bench in 1981 and served until 2017. Easterbrook, meanwhile, was appointed in 1985 and remains on the bench today. Their time as federal judges, then, began when law and economics was just beginning to gain a toehold in legal thinking and was, in a sense, the “shiny new toy” in the field. One could hypothesize that Posner and Easterbrook were eager to demonstrate the utility of economic concepts for legal decision making and that this led them to invoke the Coase theorem in instances where they considered it germane—even if only, in some cases, to note that while applicable in potential it was not directly applicable to the case at hand owing to, e.g., transaction costs.

But even here, one must take care. As Posner pointed out in a comment on Samuels and Mercurio’s (1984) analysis of his early opinions, which made much of the paucity of references to wealth maximization in those opinions, the links between one’s academic writings and judicial opinions may be tenuous at best. It is worth quoting Posner at length on this score:

Although there is bound to be some relationship, it would be quite wrong to imagine that a professor would become a judge in order to smuggle into the judicial reports the ideas he had developed as a professor, or that having become a judge, for whatever reason he had done so, he would then set about to see how much of his academic writing he could as it were enact into positive law. He will want to be thought a good judge, and he will not if he uses his position to peddle his academic ideas. He will not have the respect of his colleagues or of the bar, he will have trouble marshaling his court behind his positions, he will find that a judicial opinion is an inefficient vehicle for developing complex ideas, he will find that his opinions are discounted because of the ulterior motive behind them, and he will not have the time to write articles in opinion format. The whole atmosphere will be against him. The role of a judge is deciding cases, and then giving the reasons for the decision; it will be hard for the judge, whatever his background, to superimpose the very different role of the law

professor. And it will be quite silly and futile anyway, unless he happens to be a Supreme Court justice, because less attention is paid to opinions of lesser judges than is paid to books and major articles. (Posner 1984, 131)

A slightly different way of putting this sentiment is that the judge's concerns are with matters of law and those, in turn, are enmeshed in decades and centuries of precedent and well-developed habits of thought. The shocking and controversial result that is the Coase theorem, then, may not fit well as the grounding for a judicial opinion, and for two reasons. First, there is little benefit to invoking a result that hinges on idealized conditions—such as, in the case of the Coase theorem, the absence of transaction costs—when the reality in which the case is enmeshed departs significantly from these conditions. Second, if the theorem's logic is as foreign to law as the academic controversies over it suggest, it is not likely to have the persuasive force of other potential justifications for a particular decision.

Any supposed explanation for the small number of citations to the theorem in judicial opinions is simply conjecture, of course, but the judges' numerous references to the problems posed by transaction costs seem to loom large here. Farnsworth's findings, of course, only reinforce this. If judges are of the mind that post-trial bargaining is unlikely, there is no obvious reason to refer to the Coase theorem—even to ground an application of the efficiency criterion, such as the least-cost avoider rule in tort. Efficiency as a goal of law remains controversial, of course, but it has an ample presence in the scholarly literature and law-school curricula. The judge wishing to apply it may well feel free to move directly to some notion of efficiency without grounding it in Coase theorem-related logic.

IX. Conclusion

The foregoing discussion makes clear that the Coase theorem occupies a rather minor place in the judicial opinion literature. Even so, the roles that it plays, or the uses to which it has been put, are several, ranging from a belief that the parties will engage in post-trial bargaining if it is

to their benefit to do so, to reliance on the theorem's lessons to ground an efficiency-based justification for the decision ultimately reached. Even then, however, the theorem is often just one piece of a much more extensive set of arguments marshaled by the court in the process of reaching a decision.

The concentration of Coase theorem references in the opinions of just a handful of judges also speaks to concerns expressed in the early days of the law and economics movement, when controversies over the Coase theorem were at their height, about a dangers of a looming jurisprudence captured by the Coase theorem's ostensible vision of markets everywhere or in thrall to big business. These fears seem to be unfounded, at least so far as the Coase theorem is concerned. This is not to say that law and economics has not influenced judicial decision making or the reasoning—or rhetoric—in which judges couch their opinions. And, to the extent that the case for an economic approach to law rests on the Coase theorem, with its demonstration that, left to their own devices, people will do that which is efficient, one could argue that invocations of the efficiency criterion in legal opinions are ultimately pieces of data indicating the theorem's influence and legacy.

A proper understanding of the Coase theorem reveals that it is nothing more than an academic exercise, as its highly restrictive assumptions leave it devoid of direct real-world applicability (Medema 2019). If the history of the Coase theorem's use in judicial opinions is any indication, the judiciary, by and large, seems to have gotten the message.

References

Arrow, Kenneth J. 1969. The Organization of Economic Activity: Issues Pertinent to the Choice of Market versus Nonmarket Allocation. In *The Analysis and Evaluation of Public Policy—The PPB System: A Compendium of Papers Submitted to the Subcommittee on Economy in Government of the Joint Economic Committee, Congress of the United States*. Washington, D.C.: U.S. Government Printing Office for the Joint

Economic Committee.

- Ash, Elliott, Daneil L. Chen, and Suresh Naidu. 2019. Ideas Have Consequences: The Impact of Law and Economics on American Justice. Working Paper, March 20.
- Becker, Gary S. 1968. Crime and Punishment: An Economic Approach. *Journal of Political Economy* 76 (2): 169-217.
- Burrows, Paul. 1970a. Nuisance: The Law and Economics. *Lloyds Bank Review* 95 (January): 36-46.
- Butler, Henry N. 1999. The Manne Programs in Economics for Federal Judges. *Case Western Reserve Law Review* 50 (2): 351-420.
- Calabresi, Guido. 1961. Some Thoughts on Risk Distribution and the Law of Torts. *Yale Law Journal* 70 (March): 499-553.
- Calabresi, Guido. 1970. *The Cost of Accidents: A Legal and Economic Analysis*. New Haven, CT: Yale University Press.
- Coase, Ronald H. 1959. The Federal Communications Commission. *Journal of Law and Economics* 2: 1-40.
- Coase, Ronald H. 1960. The Problem of Social Cost. *Journal of Law and Economics* 3: 1-44.
- Coase, Ronald H. 1993. Law and Economics at Chicago. *Journal of Law and Economics* 36 (1): 239-254.
- Farnsworth, W. 1999. Do Parties to Nuisance Cases Bargain after Judgment? A Glimpse Inside the Cathedral. *University of Chicago Law Review* 66 (2): 373-436.
- Harrison, Jeffrey L. 2012. The Influence of Law and Economics Scholarship on Contract Law: Impressions Twenty-Five Years Later. *NYU Annual Survey of American Law* 68: 1-46.
- Jolls, Christine, Cass R. Sunstein, and Richard Thaler. 1998. A Behavioral Approach to Law and Economics. *Stanford Law Review* 50 (5): 1471-1550.
- Kahneman, Daniel, Jack L. Knetsch, and Richard H. Thaler. 1990. Experimental Tests of the Endowment Effect and the Coase Theorem. *Journal of Political Economy* 98 (6):

1325-1348.

- Kelman, Mark. 1979. Consumption Theory, Production Theory, and Ideology in the Coase Theorem. *Southern California Law Review* 52 (3): 669-698.
- Kitch, Edmund W. 1983. The Fire of Truth: A Remembrance of Law and Economics at Chicago, 1932-1970. *Journal of Law and Economics* 26 (1): 163-234.
- Landes, William M. and Sonia Lahr-Pastor. 2011. Measuring Coase's Influence. *Journal of Law and Economics* 54 (4): S383-S401.
- Mata, Tiago and Steven G. Medema 2013. *The Economist as Public Intellectual*. Durham, NC: Duke University Press.
- Medema, Steven G. 1999. Legal fiction: The Place of the Coase Theorem in Law and Economics. *Economics and Philosophy* 15 (2): 209-233.
- Medema, Steven G. 2019. The Coase Theorem at Sixty. *Journal of Economic Literature* (forthcoming).
- Posner, Richard A. 1973. *Economic Analysis of Law*. Boston: Little, Brown.
- Posner, Richard A. 1984. Wealth Maximization and Judicial Decision Making. *International Review of Law and Economics* 4 (2): 131-135.
- Posner, Richard A. 1986. *Economic Analysis of Law*, 3rd edn. Boston: Little, Brown.
- Posner, Richard A. 1998. Rational Choice, Behavioral Economics, and the Law. *Stanford Law Review* 50 (5): 1551-1575.
- Samuels, Warren J. And Nicholas Mercurio. 1984. Posnerian Law and Economics on the Bench. *International Review of Law and Economics* 4 (2): 107-130.
- Samuels, Warren J. And Nicholas Mercurio. 1984. Wealth Maximization and Judicial Decision Making: The Issues Further Clarified. *International Review of Law and Economics* 6 (1): 133-37.
- Samuelson, Paul A. 1963. Modern Economic Realities and Individualism. *Texas Quarterly* 6 (Summer): 128-139.

- Samuelson, Paul A. 1967. The Monopolistic Competition Revolution. In Robert E. Kuenne, ed., *Monopolistic Competition Theory: Studies in Impact. Essays in Honor of Edward H. Chamberlin*. New York: John Wiley.
- Samuelson, Paul A. 1973. *Economics*. New York: McGraw Hill.
- Samuelson, Paul A. 1995. Some Uneasiness with the Coase Theorem. *Japan and the World Economy* 7 (1): 1-7.
- Schwab, Stewart. 1989. Coase Defends Coase: Why Lawyers Listen and Economists Do Not. *Michigan Law Review* 87 (6): 1171-98.
- Stigler, George J. 1966. *The Theory of Price*, 3rd edn. New York: Macmillan.