RECONSIDERING THE DUTY TO SETTLE

*Seth J. Chandler**

TABLE OF CONTENTS

I. INTRODUCTION

Most American jurisdictions impose a duty on liability insurers defending their insured in litigation to act in "good faith" in evaluating settlement offers made by the plaintiff.[1] This duty, sometimes abbreviated as "the duty

* Associate Professor of Law, University of Houston Law Center. A.B., Princeton University, 1979; J.D., Harvard Law School, 1983. I gratefully acknowledge the support of the University of Houston Law Foundation in the preparation of this Article. I also express my

to settle," requires an insurer to accept "reasonable" settlement offer made by a plaintiff when there is a substantial risk that permitting the case to go forward will result in a judgment or subsequent settlement large enough to pierce the upper limits of the insurance policy and threaten the personal assets of the insured.[2] To enforce this duty, courts have fashioned a private right of action in damages for the insured against the liability insurer for breach of this obligation. Several state legislatures also provide the insured with a private right of action against an insurer who fails to settle in good faith. [3]

Although the duty to settle and the accompanying private right of action have existed for many years, few scholars have considered with any rigor the effect of this duty and right on the outcome of litigation between the plaintiff-victim and the defendant-insured.[4] Likewise, few scholars have considered the effects of the doctrines on the pricing of liability insurance contracts or the compensation of victims. This Article attempts to remedy that gap by undertaking an economic analysis of the duty to settle. It concludes that the imposition of a duty to settle has four significant effects.

---

appreciation to Richard Alderman, David Dow, Michael Olivas, and Joseph Sanders for their review of this Article. Graphics for this Article were produced using STEPHEN WOLFRAM, MATHEMATICA (2d ed. 1991) (Windows Version 2.2), and Visio. Computations were performed using Mathematica for Windows 2.2.

1. A recent count shows that 47 states have imposed a duty to settle as part of their common law or through statute. *See* Kent D. Syverud, *The Duty to Settle*, 76 VA. L. REV. 1113, 1120 n.14 (1991). *See generally* ROBERT H. JERRY II, UNDERSTANDING INSURANCE LAW § 112 (1990) (discussing variations in the law relating to the duty to settle).

2. Pruett v. Farmers Ins. Co., 857 P.2d 1301 (Ariz. Ct. App. 1993); Wierck v. Grinnell Mut. Reinsurance Co., 456 N.W.2d 191 (Iowa 1990).

3. *See, e.g,* Klaudt v. Flink, 658 P.2d 1065, 1068 (Mont. 1983) (recognizing insured must show insurer's lack of good faith) *overruled on other grounds by* Fode v. Farmers Ins. Exch., 719 P.2d 414 (Mont. 1986); Vail v. Texas Farm Bureau Mut. Ins. Co., 754 S.W.2d 129 (Tex. 1988) (interpreting the Deceptive Trade Practices Act and the Insurance Code to provide a private right of action for failure to settle in good faith). *But cf.* Maler v. Superior Court, 270 Cal. Rptr. 222 (Cal Ct. App. 1990) (holding § 790.03(h)(5) of the California Insurance Code does not give insureds a private right of action for unfair claims-settlement practices engaged in by liability insurers); White v. Unigard Mut. Ins. Co., 730 P.2d 1014 (Idaho 1986) (holding Idaho's Unfair Claims Settlement Practice Act does not create a private right of action for breach of the duty to settle).

4. The main exception is Charles Silver, *A Missed Misalignment of Interests: A Comment on Syverud, The Duty to Settle*, 77 VA. L. REV. 1585 (1991). Professor Silver discusses some of the basic mathematics of the duty to settle. Other discussions of the issue may be found in KENNETH ABRAHAM, DISTRIBUTING RISK: INSURANCE, LEGAL THEORY, AND PUBLIC POLICY 193 (1986). In that pivotal monograph, Professor Abraham briefly asserts that imposition of a duty to settle will lead the insurer to settle cases it would not otherwise settle. Professor Abraham does not consider the matter in any depth, however, and does not analyze the magnitude of the change in behavior or its consequences. In his treatise on insurance, Professor Robert H. Jerry II concludes that a "strict liability" standard would lead insurers to settle at the policy limits in cases in which coverage was doubtful. JERRY, *supra* note 1, at 589. Professor Jerry does not explain his conclusions, however.

First, imposing a duty to settle will increase the number of cases involving insured tortfeasors that will be resolved by settlement rather than by trial.

Second, imposing a duty to settle will on balance increase the amount for which cases settle and therefore lead to greater compensation of victims injured by insured tortfeasors. Particularly generous remedies for breach of the duty to settle will occasionally lead to "overcompensation" of victims who are injured by persons with liability insurance.

Third, imposing a duty to settle will likely increase the premiums for liability insurance. The effect of this premium increase on the number of persons purchasing liability insurance and the type of liability insurance policies purchased is logically indeterminate, but the premium increase is most likely to promote sale of high-limits policies. If, however, overall purchases of liability insurance decline in response to the change in prices, some otherwise protected victims will be exposed to financially irresponsible tortfeasors.

Fourth, imposing a duty to settle, particularly when a generous remedy exists for its breach, is likely to decrease care by potential tortfeasors and may induce insureds to thwart settlement efforts by insurers.

This Article proceeds to these conclusions as follows. Part II outlines a largely noncooperative "game" played by an insured tortfeasor, an insurer, and a victim that attempts to model the salient features of a lawsuit against an insured. The discussion will delineate the sequence of moves available to the players in the game and the information available to the players at each move. Part III relies on game theory to show how variations in the law relating to the duty to settle alter the range of settlement proposals that might actually result in settlement of the lawsuit. It then shows how imposing a duty to settle alters the positions of the tortfeasor, insurer, and victim in situations when settlement of a particular case proves impossible and the case proceeds to trial. Part IV fits the duty to settle into the concept of agency costs and concludes that while the law of contracts should imply a duty to settle as a default rule in insurance contracts, sophisticated parties should be able to bargain out of this default arrangement. It cautions against imposing punitive damages or other harsh sanctions against insurers for breach of the duty to settle. Harsh sanctions lead to overcompensation of victims, a serious problem of moral hazard, and difficult-to-police noncooperation on the part of the insured. A technical appendix attached to this Article exposes mathematics otherwise placed behind the scenes.

II. THE STRUCTURE OF THE MODEL

A. *Conditions Existing at the Outset of the Game*

This Article uses the techniques of discrete game theory to determine the effect of legal doctrine regarding a duty to settle on the likely resolution of litigation brought by a victim against an insured tortfeasor. The result is a

"game" that attempts to capture the realities of modern tort litigation and that shows how changes in the rules of that game relating to imposition of liability for breach of the duty to settle alter the optimal strategies for the participants in the game.

1. *The Liability Insurance Contract*

The game has three players: a liability insurer (*I*), a tortfeasor (*T*), and a victim (*V*).[5] Prior to the game, *T* has entered into a liability insurance contract with *I*. The contract creates a duty on the part of *I* to indemnify *T*, at least in part, for some subset of activities (often known as "occurrences") by *T* whereby *T* incurs liability to *V*. A "policy limit" and other characteristics of the insurance contract such as a per occurrence deductible amount and a coinsurance factor determine the extent of *I*'s duty to indemnify. As part of the contract, *T* cedes to *I* the right to control litigation against *T* arising out of occurrences and to settle cases at its discretion for amounts equal to or less than the limits of the policy.[6] To settle cases for amounts in excess of policy limits, *T*'s consent is generally required.[7] *I*, in turn, covenants to perform these duties competently. The contract also generally provides, either explicitly or as a matter of judicial interpretation, that if *I* lawfully settles a case or satisfies a judgment against *T*, but *T* refuses to tender its contractual share of the settlement amount or judgment, *I* can sue *T* and obtain the contractual share as damages.[8]

2. *Information of the Parties as to the Law of Bad Faith*

The model employed is one of what game theorists call "complete information":[9] The model assumes the parties have perfect knowledge of the contours of applicable law regarding the duty to settle. Application of the law to a given set of facts will be imperfectly predictable, but the parties at least

---

5. For purposes of simplicity, this Article assumes that all occurrences or accidents giving rise to coverage under the liability insurance policy affect only one potential victim or group of victims with a single representative, as in a damages class action. This Article therefore excludes explicit consideration of how a duty to settle functions precisely when all entities injured by an occurrence are not bound by a single proceeding.

6. *See* 7C JOHN APPLEMAN & JEAN APPLEMAN, INSURANCE LAW AND PRACTICE § 4711 (Walter F. Bendal ed., 1979); 14 COUCH ON INSURANCE 2D § 51:8 (rev. ed. 1982).

7. *See* 7C APPLEMAN & APPLEMAN, *supra* note 6, § 4711 (citing New Amsterdam Casualty Co. v. East Tenn. Tel. Co., 139 F. 602, 604 (6th Cir. 1905), *cert. denied*, 201 U.S. 646 (1906)).

8. Casualty Ins. Co. v. Town & Country Pre-School Nursery, 498 N.E.2d 1177 (Ill. App. Ct. 1986); Hendrix v. City of New Orleans, 562 So. 2d 1164 (La. Ct. App. 1990); Nationwide Mut. Ins. Co. v. Public Serv. Co., 435 S.E.2d 561 (N.C. Ct. App. 1993).

9. *See* ERIC RASMUSEN, GAMES AND INFORMATION: AN INTRODUCTION TO GAME THEORY 51 (1989) (stating game of complete information is one in which "nature" (random forces) does not move first in a fashion undetected by any of the players).

know how the court will approach the problem. The parties' knowledge relating to the duty to settle is set forth in detail below, but falls into three categories: (1) knowledge regarding the content of the duty to settle, (2) knowledge regarding the circumstances under which the insured is excused from that duty, and (3) knowledge regarding the measure of damages in an action for breach of the duty to settle.

a. *Knowledge Regarding the Content of the Duty to Settle* . As many commentators have noted, the precise language describing the duty varies from state to state.[10] Some states use a "negligence" standard to determine whether the insurer is liable.[11] Under the negligence approach, the insurer is liable if it failed to use "due care" or acted "unreasonably" in rejecting a settlement offer.[12] Other courts hold that the insurer must have acted in "bad faith."[13] The bad faith standard formally focuses on the insurer's disregard of the interests of the insured in evaluating settlement offers[14] but in practice closely resembles a negligence approach that is more lenient to the insurer.[15] No American jurisdiction holds insurers strictly liable for breach of the duty to settle merely for turning down a settlement offer within policy limits.[16]

For purposes of economic analysis, however, these verbal distinctions are relatively unimportant. What matters is at what value, relative to an "actuarial value of the case,"[17] the law is likely to find a settlement offer so

---

10. *See, e.g.*, 7C APPLEMAN & APPLEMAN, *supra* note 6, § 4712 at 587-90; JERRY, *supra* note 1, § 112; BARRY R. OSTRAGER & THOMAS R. NEWMAN, HANDBOOK ON INSURANCE COVERAGE DISPUTES § 12.06 (5th ed. 1992).

11. *See, e.g.*, Robertson v. Hartford Accident & Indem. Co., 333 F. Supp. 739, 741 (D. Or. 1970); Aetna Casualty & Sur. Co. v. Kornbluth, 471 P.2d 609, 611 (Colo. Ct. App. 1970); Rector v. Husted, 519 P.2d 634, 640 (Kan. 1974); Shamblin v. Nationwide Mut. Ins. Co., 396 S.E.2d 766 (W. Va. 1990).

12. Jefferson v. Allstate Ins. Co., 673 F. Supp. 1401, 1402 (D.S.C. 1987); Gedeon v. State Farm Mut. Auto. Ins. Co., 188 A.2d 320, 322 (Pa. 1963).

13. Ganaway v. Shelter Mut. Ins. Co., 795 S.W.2d 554, 556 (Mo. Ct. App. 1990); Lovell v. Nationwide Mut. Ins. Co., 424 S.E.2d 181, 184 (N.C. Ct. App. 1993).

14. In most jurisdictions, the insured need not prove "a dishonest purpose or moral obliquity" to demonstrate bad faith. Awrey v. Progressive Casualty Ins. Co., 728 F.2d 352, 357 (6th Cir. 1984) (applying Michigan law), *cert. denied*, 474 U.S. 920 (1985). A showing of negligence may well suffice to establish "bad faith" liability. *See* Davis v. Cincinnati Ins. Co., 288 S.E.2d 233 (Ga. Ct. App. 1982).

15. *See* ALLEN D. WINDT, INSURANCE CLAIMS AND DISPUTES § 5.12, at 257-58 (2d ed. 1988 & Supp. 1990).

16. The case of Johansen v. California State Auto. Ass'n Inter-Insurance Bureau, 538 P.2d 744 (Cal. 1975), is sometimes misconstrued as creating strict liability for failure to settle within policy limits. In fact, the *Johansen* court merely refused to allow an insurer's misconstruction of its duty to indemnify to excuse the insurer from its duty to settle. Only in that sense is it true an insurer that misconstrues its coverage obligations is strictly liable for an excess judgment. *Id.* at 746.

17. "Actuarial value of the case" means the expected judgment in the case. If J represents the set of all possible judgments in the case and $p[j]$ represents the perceived odds the court

"reasonable" that the insurer is deemed to have breached its duty to settle by turning it down. In attempting to predict the behavior of the players in response to settlement offers, it is assumed that each player accurately perceives an inverse relationship between the size of a settlement proposal and the likelihood a subsequent court will view *I*'s rejection of that offer as constituting bad faith. If *I* perceives that the likelihood of being found to have breached its duty to its insured will become high only if *I* rejects a settlement offer less than 100% of the perceived actuarial value of the case, then *I*'s behavior may differ from that when it expects a court to find it in breach only if it rejects a settlement offer less than 150% of the perceived actuarial value of the case.

b. *Knowledge Regarding Facts Excusing the Duty to Settle.* In most jurisdictions, courts find that an insurer "rejects a settlement offer at its peril."[18] That is, most courts do not excuse the insurer from liability for refusing settlement offers that would otherwise constitute breach of the duty to settle because the insurer reasonably but erroneously believed it had no duty to indemnify the tortfeasor. Wisconsin, and perhaps other states, do permit fairly debatable coverage concerns on the part of the insurer to excuse the duty to settle.[19] The model in this Article assumes the players know whether coverage ambiguities may potentially excuse the duty to settle.

c. *Knowledge Regarding Extra-Contractual Damages for Breach of the Duty to Settle.* In the model employed here, the players likewise know how the court will compute damages for breach of the duty to settle. Currently, courts employ a variety of methods. The prevalent remedy is to award the insured the difference between the amount the insured theoretically owes the

---

will render a judgment in amount j (where $j \in J$), then the actuarial value is represented by the expression:

$$\int_{j \in J} p[j]j\,dj \text{ or } \sum_{j \in J} p[j]j.$$

18. *See* Johansen v. California State Auto. Ass'n Inter-Insurance Bureau, 538 P.2d at 748-49.

19. Mowry v. Badger State Mut. Casualty Co., 385 N.W.2d 171, 180 (Wis. 1986). The "perhaps" is necessary because the law in this area is not fully developed. A great many states excuse insurers *other than liability insurers* for breach of a duty or implied covenant of good faith and fair dealing (and the attendant extra-contractual damages) in the event of a legitimate dispute as to what is usually known as "coverage." *See* Douglas G. Houser, *Good Faith as a Matter of Law: The Insurance Company's Right to be Wrong*, 27 TORT & INS. L.J. 665 (1992) (summarizing case law and divergent state standards). Only the Wisconsin courts have held explicitly that this principle applies to a liability insurer's evaluation of settlement offers when defending its insured pursuant to a valid reservation of rights or nonwaiver agreement. Mowry v. Badger State Mut. Casualty Co., 385 N.W.2d at 180. Although respectable "parity" arguments can be made to extend the "legitimate dispute" defense to liability insurers, policy considerations, coupled with the arguable difference between a general duty of good faith and a specific duty to settle, caution against mechanical extension of this doctrine. *See infra* text accompanying notes 78-80.

victim as the result of judgment or settlement and the amount the insured would have owed had the insurer accepted an earlier reasonable settlement offer.[20] For example, if an insured had a liability insurance contract with a policy limit of $100,000 and a deductible of $1000, and the insurer had rejected a "reasonable" settlement offer from the victim of $92,000, the insured would be entitled to extra-contractual damages of $253,000 if a court entered judgment in favor of the victim for $353,000.[21] Most courts do not reduce this award to take into account any failure of the insured actually to have paid this amount to the victim or any inability of the insured ever to pay the amount of the excess judgment.[22] Many courts do not augment the award to take into account emotional distress the insured may suffer simply as a result of a potential exposure to an excess judgment.[23]

Other jurisdictions depart from the standard measure of damages. Some states, particularly those that view the duty to settle as part of tort law, permit awards of punitive damages against the insurer for unreasonable refusals to settle.[24] Other states statutorily heighten damages, permitting treble damages or other forms of penalties.[25] Still other states limit damages

---

20. *See generally* ROBERT E. KEETON & ALAN I. WIDISS, INSURANCE LAW § 7.8(h)-(i) (student ed. 1988) (discussing range of remedies).

21. Of course, the insured is also entitled to $99,000 in contractual damages, but insurers generally do not dispute this obligation unless there is a question over coverage.

22. The cases on this point are collected in 14 COUCH ON INSURANCE 2D, *supra* note 6, § 51:29; and in Crabb v. National Indem. Co., 205 N.W.2d 633 (S.D. 1973). The reasoning underlying this point rests in part on the fact that if the insurer makes a payment to the insured to help the insured discharge a judgment against it, the insurer thereby alters the amount of assets of the insured subject to execution. Thus, it becomes intractable to tie the amount of the insurer's indemnity obligation to the amount of assets of the insured subject to execution. *Cf.* Beacon Lamp Co. v. Travellers' Ins. Co., 47 A. 579, 582 (N.J. Ch. 1900) (Vice Chancellor Pitney expressing consternation in a similar situation involving liability insurance payments to an insolvent insured as to the "practicalities" and as to how the calculation of damages would be done). Many courts avoid this problem by making the insurer's obligation as a result of the excess judgment independent of the insured's net worth. Another alternative, essentially adopted by Michigan, views the insurer's obligation as going to the victim, in which case the act of payment does not alter the net worth of the insured. *See infra* text accompanying notes 63-65; KEETON & WIDISS, *supra* note 20, § 7.8(h)(4) (advocating this approach). Yet another alternative is to bar the victim from executing an excess judgment beyond the amount initially paid in extra-contractual damages by the insurer.

23. Filasky v. Preferred Risk Mut. Ins. Co., 734 P.2d 76 (Ariz. 1987); Purdy v. Pacific Auto. Ins. Co., 203 Cal. Rptr. 524 (Ct. App. 1984); Murphy v. Allstate Ins. Co., 553 P.2d 584 (Cal. 1976); Gibson v. Western Fire Ins. Co., 682 P.2d 725 (Mont. 1984); *see also* Farmers Group, Inc. v. Trimble, 658 P.2d 1370 (Colo. Ct. App. 1982) (holding damages to an insured based on credit-rating impairment may be compensable if caused by negligence of liability insurer), *aff'd*, 691 P.2d 1138 (Colo. 1984); Barr v. General Accident Group Ins. Co. of N. Am., 520 A.2d 485 (Pa. Super. Ct.) (same), *appeal denied*, 536 A.2d 1327 (Pa. 1987).

24. *See, e.g.*, Hayes Bros. v. Economy Fire & Casualty Co., 634 F.2d 1119 (8th Cir. 1980); Oppel v. Empire Mut. Ins. Co., 517 F. Supp. 1305 (S.D.N.Y. 1981); Jenkins v. J.C. Penney Casualty Co., 280 S.E.2d 252 (W. Va. 1981).

25. *See* Vail v. Texas Farm Bureau Mut. Ins. Co., 754 S.W.2d 129 (Tex. 1988) (discussing the Texas Deceptive Trade Practices Act).

to that part of the excess judgment the insured either has paid or is able to pay the victim.[26]

3. *Knowledge of the Parties Relating to Financial Positions*

The model employed assumes the players have known perceptions about aspects of *T*'s financial position, including the amount of assets *T* has to satisfy a judgment, the features of the liability insurance contract between *T* and *I*, and the likelihood that the liability insurance policy will indeed obligate *I* to indemnify *T*. These perceptions may or may not be accurate, but the players do know the perceptions of each of the other players.[27] Likewise, the model assumes the players know from the outset of the game the utility each player ascribes to different levels of wealth.

4. *Knowledge of the Parties Relating to the Occurrence*

At the outset of the game an accident takes place for which *T* is potentially liable and as to which *I* may have some duty to indemnify *T*. *I* has agreed to defend *T*, but has preserved its ability to contest any obligation it may have to indemnify *T* based on limitations or conditions in the insurance contract.[28]

---

26. *See generally* Bourget v. Government Employees Ins. Co., 456 F.2d 282 (2d Cir. 1972) (finding under Connecticut law that an assetless and deceased victim of a bad faith refusal by the insurer to settle suffered no damages); Frankenmuth Mut. Ins. Co. v. Keeley, 461 N.W.2d 666 (Mich. 1990) (discussing positions of the various states on this matter), *rev'g on reh'g* 447 N.W.2d 691 (Mich. 1989).

27. Assuming the players know the other players' estimates of certain factual parameters is, of course, somewhat phony. In defense, these assumptions are conventional in game theory and, indeed, less restrictive than a frequent assumption that the players share a common estimate of some factual parameter. H. SCOTT BIERMAN & LOUIS FERNANDEZ, GAME THEORY WITH ECONOMIC APPLICATIONS 70 (1993); JAMES W. FRIEDMAN, GAME THEORY WITH APPLICATIONS TO ECONOMICS 11 (1986).

28. In some jurisdictions, the insurer preserves its ability to contest its duty to indemnify by promptly sending its insured a "reservation of rights letter" that sets forth the potential bases on which the law may excuse the insurer from its duty to indemnify or even its duty to pay for the legal defense of its insured. *See* 7C APPLEMAN & APPLEMAN, *supra* note 6, § 4686. A true reservation of rights letter is an offer the insured cannot refuse. In other jurisdictions, the insurer will have to enter into a "non-waiver agreement" with its insured whereby the insured consents to the insurer's control over defense of the lawsuit without waiver of defenses excusing the insurer from its duty to indemnify. *Id.* A legitimate refusal by the insured to execute a non-waiver agreement puts the insurer in a difficult position. The insurer may have to choose between defending its insured unconditionally (*i.e.*, waiving all coverage defenses) or not defending its insured at all. In the latter case, the insurer runs a serious risk, known sometimes as the "Sweetheart Deal," in which the insured and its "victim" form a coalition against the insurer. Jerry Grissom, *The Sweetheart Deal Revisited: When is It Appropriate to Spend Somebody Else's Money?*, *in* THE SECOND ANNUAL ULTIMATE INSURANCE SEMINAR 1 (1993). The victim covenants not to execute on the assets of the insured. In return, the insured shades its defense so as to induce a large judgment against the insured and assigns its claim against the insurer to

As the game begins, the players do not know whether a court would find *T* liable for the accident or the amount of damages it would award. The players each possess, however, an estimate of the probable distribution of damage awards, including a damage award of zero in the event the court renders judgment for *T*.[29] Figure 1 illustrates a sample cumulative distribution.[30] Each of the players' perceptions as to the distribution of damage awards is known to the other players. The players likewise do not know for certain whether the court will rule that the liability insurance contract obligates *I* to indemnify *T* for the particular occurrence at issue. Each has an estimate, however, as to the likelihood of the court finding coverage. Each player's estimate is known to the other players.

---

the victim. Although the insurer will always be permitted in subsequent coverage litigation to contest whether it had a duty to defend and indemnify its insured at all, in some jurisdictions it may have a very limited ability, having lost the coverage argument, to dispute the amount of damages awarded. *See,* e.g., Employers Casualty Co. v. Block, 744 S.W.2d 940 (Tex. 1988); Ranger Ins. Co. v. Rogers, 530 S.W.2d 162 (Tex. Civ. App. 1975); *cf.* United States Aviation Underwriters v. Olympia Wings, Inc., 896 F.2d 949 (5th Cir. 1990) (predicting under the *Erie* doctrine that the Texas Supreme Court would not follow the *Ranger* decision). The ability of the insured to threaten the insurer expressly or implicitly with the Sweetheart Deal is likely to expand the number of cases in which the insurer will offer an unconditional defense, which, in turn, will increase the cost of liability insurance. This Article does not undertake a full discussion of the precise mechanism whereby this cost increase occurs.

29. This Article assumes this distribution is unaffected by the existence or contours of any liability insurance policy. *See* FED. R. EVID. 411 (excluding evidence of the existence of insurance policies).

30. Cumulative probability distribution function means one in which the number on the y-axis reflects the probability the amount of damages awarded will be equal to *or less than* the corresponding amount on the x-axis. In the sample distribution, the odds, for example, of a defense judgment are 40%. The odds that a judgment would be no greater than policy limits are 62%. The odds that a judgment would be no greater than 200% of policy limits are 84%.

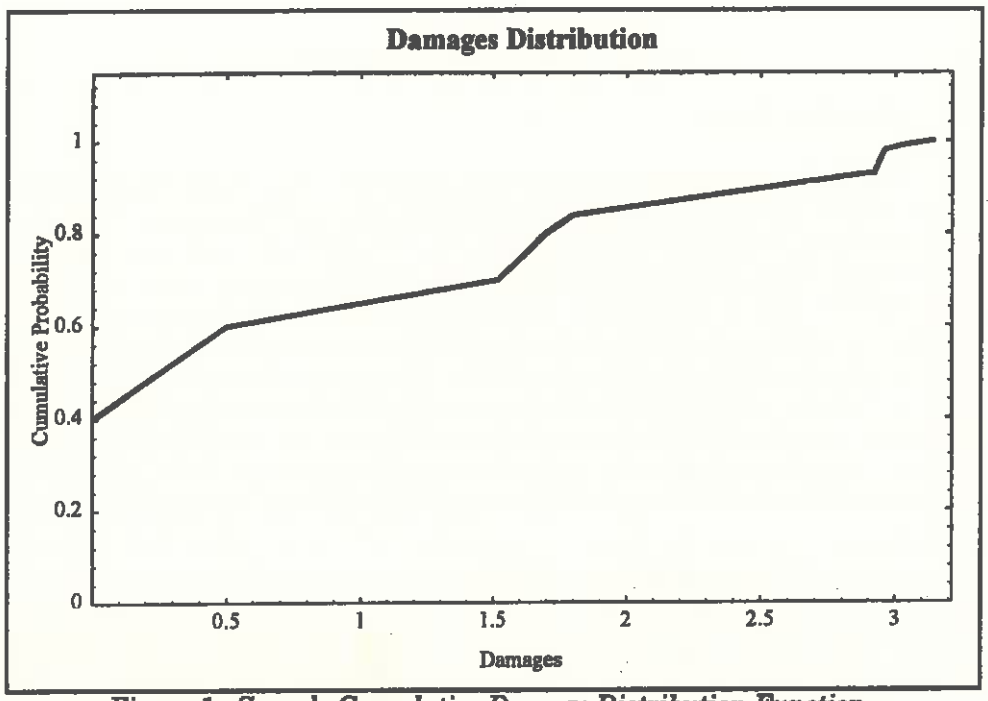


Figure 1: Sample Cumulative Damage Distribution Function

B. *Other Assumptions Relating to Rationality, Bargaining, and Litigation Costs*

Two other assumptions have been made that have limited accuracy, but are helpful and conventional for analytic purposes. The first assumption is that the victim, insured, and insurer are each rational and make decisions to minimize their expected unhappiness (or, equivalently, maximize their expected happiness). This level of expected unhappiness is assumed to be quantifiable, although the precise method of quantification is irrelevant to the analysis and conclusions.[31]

The second assumption, relaxed in Part III(E), is that the victim, insured, and insurer are not able to bargain with each other after an accident about the structure of the insurance contract or any assignment of causes of action.[32]

---

31. *See* JAMES M. HENDERSON & RICHARD E. QUANDT, MICROECONOMIC THEORY: A MATHEMATICAL APPROACH 19-23 (2d ed. 1971); DAVID M. KREPS, A COURSE IN MICROECONOMIC THEORY 76-77 (1990).

32. Persons familiar with game theory will recognize that this Article has largely confined itself to the realm of noncooperative game theory. Future scholars may wish to consider the extent to which the ability of T, I, and V to form coalitions may alter any of the analysis contained in this Article.

C. *The Game in Extensive Form*

1. *The Main Game*

The game begins when an external mediator or one of the players in the game makes a proposal[33] to settle *V*'s lawsuit against *T* by paying *V* a specified amount in exchange for *V*'s release of *T*. The liability insurance contract determines what portion of the settlement payment is to be made by *T* and what portion is to be made by *I*. All the players effectively appraise the other players' perceptions regarding the acceptability of the settlement proposal.[34] The players in the game learn the others' provisional views of the proposal and are able to revise their decisions regarding the settlement proposal. The appraisal of each other's views continues until, given the position of the other players regarding settlement, none of the parties can improve its position by making a different decision.[35] "Settlement Equilibrium Proposals" are set-

---

33. If made by one of the game participants, however, the offer is considered nonbinding.

34. This Article assumes when faced with a settlement offer, the insurer can do only one of two things: agree to tender the amount required by the liability insurance contract or decline to do so. This initial assumption is made not only for the analytic simplicity it affords, but also because many courts frown on efforts by the insurer to persuade the insured to settle a case by paying more than the insured's contractual share of the settlement amount. *See, e.g.*, Brochstein v. Nationwide Mut. Ins. Co., 448 F.2d 987 (2d Cir. 1971), *cert. denied*, 405 U.S. 921 (1972); Brown & McCabe Stevedores, Inc. v. London Guar. & Accident Co., 232 F. 298 (D. Or. 1915); Rova Farms Resort, Inc. v. Investors Ins. Co. of America, 323 A.2d 495 (N.J. 1974); Netzley v. Nationwide Mut. Ins. Co., 296 N.E.2d 550 (Ohio Ct. App. 1971); *see also* 14 COUCH ON INSURANCE 2D, *supra* note 6, § 51:12 & n.6 (collecting further authorities). This assumption may not be realistic because not all jurisdictions may adhere to this position and because insurers can probably evade most prohibitions that exist. This evasion may be particularly likely when the insured is a sophisticated party who understands that payment of more than the deductible amount to settle a case within policy limits may spare it the risk of a judgment in excess of policy limits unreimbursed by bad faith damages from the insurer.

Another seemingly sensible strategy, although one not generally encountered, would be for the insured and insurer to undertake an "efficient reformation" of the insurance contract in which the insurer would increase the policy limits for a particular occurrence in exchange for some additional premium by the insured. *See generally* Steven Shavell, *Damage Measures for Breach of Contract*, 11 BELL J. ECON. 466 (1980) (discussing impediments to such renegotiations). Such a trade would increase the insurer's potential contractual liability but decrease its expected extra-contractual liability. The insured would be agreeing, in some sense, to a devaluation of its potential cause of action for breach of the duty to settle in exchange for a reduction in the risk of an excess judgment that did not result from a breach of the duty to settle.

Giving the insurer and insured the flexibility suggested by these two alternative strategies may require abandonment of noncooperative discrete game theory, however, in exchange for the greater challenges of cooperative differential game theory in which the insured and insurer form a coalition.

35. Most conventional liability insurance contracts do not let the insured veto a settlement for an amount less than policy limits. 7C APPLEMAN & APPLEMAN, *supra* note 6, § 4714. Perhaps, then, the insured should not be considered as having a meaningful "turn" at this stage of the game with respect to such offers. This Article chooses this more general model of the set-

tlement proposals in amounts such that none of the players in the game can hope to improve its position by rejecting the proposal.[36]

Figure 2 illustrates the basic structure of the game in decision-tree form, or in what game theorists call "extensive form." An extensive form shows the order in which the players make decisions ("turns" or "moves"), the options available to each player at its respective turn, and the information possessed by the player at the time of its turn regarding the prior moves of the other players.[37] Dashed ovals around a set of a player's turns indicate that the player cannot tell in which of the several nodes within the oval it is operating. More formally, the player has a "coarse information partition" in that it has no way of further narrowing the set of move-sequences that preceded its turn.[38] *I*, for example, must make its decision regarding the settlement proposal without knowing whether *T* and *V* have accepted the proposal.[39]

---

tlement process and gives the insured a turn because doing so permits analysis of liability insurance contracts such as many professional malpractice policies that do permit such vetos. In addition, this methodology accommodates analysis of the more conventional liability insurance arrangements simply by monumentally penalizing the insured that chooses to veto a settlement offer for less than policy limits. *See infra* text accompanying notes 43-44 (discussing the Tortfeasor-Forced Trial Subgame).

36. Those familiar with game theory will recognize this Article has described a "Nash Equilibrium" to a noncooperative game with incomplete information. The game is noncooperative because no party is able to bind any other to its provisional views regarding settlement. Incomplete information exists because no party can insist on being the last to decide whether to accept a settlement proposal. Accordingly, each party makes its decision regarding settlement with incomplete information as to the settlement positions of the other parties.

37. For a superb explanation of the extensive form, *see* KREPS, *supra* note 31, at 353-76. Less formal explanations may be found in Ian Ayres, *Playing Games with the Law*, 42 STAN. L. REV. 1291 (1990); Martin Shubik, *Game Theory, Law and the Concept of Competition*, 60 U. CIN. L. REV. 285 (1991).

38. *See* RASMUSEN, *supra* note 9, at 48-51 (describing information sets and information partitions).

39. Accordingly, analysis of this game would be the same regardless of the order in which *V*, *I*, and *T* react to a settlement proposal.

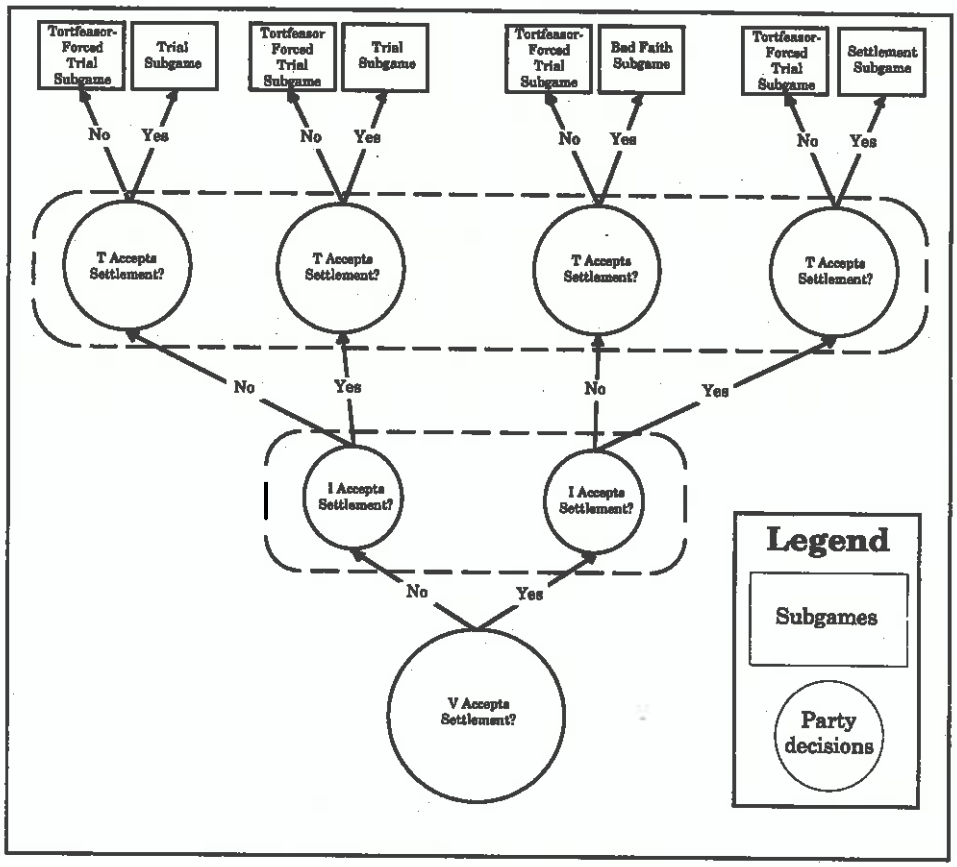


Figure 2: Basic Game Structure

The game depicted in Figure 2 is particularly complex. In selecting settlement strategies the players do not immediately obtain a payoff, but rather determine which of several possible "subgames" they will play next.[40] The players therefore make strategic decisions in the main game based on the anticipated outcomes of these subgames they might play. If the players all accept the proposal, the game that follows is quite simple. The players pursue the "Settlement Subgame," in which the court determines whether *I* owes a duty to indemnify *T*, and, if not, the extent to which *T* must reimburse *I* for amounts already paid in settlement to *V*. If *I* vetoes decisions by the other

40. The following moves are defined as a subgame because *T*, *I*, and *V* know at the start of each subgame how all of the players have reacted to the settlement proposal. Information for each of the subgames is perfect. *See* KREPS, *supra* note 31, at 423 (setting forth criteria for a subgame); RASMUSEN, *supra* note 9, at 85 (same). Qualifying a game as a "subgame" is extraordinarily useful because the game can then be "solved" by the conceptually straightforward process of backward induction. *See generally* BIERMAN & FERNANDEZ, *supra* note 27, at 14-16 (providing clear explanation of backwards induction).

players that would otherwise result in settlement, the parties play the "Bad Faith Subgame," in which the court first tries *V*'s case against *T* on the merits and then may try a bad faith action against *I* for breach of the duty to settle. If *T* rejects the settlement proposal, the parties play the "Tortfeasor-Forced Trial Subgame." Under all the other strategy combinations employed by the players, the parties play the "Trial Subgame," in which the court tries *V*'s case against *T* on the merits.

To understand the circumstances under which all parties might prefer playing the Settlement Subgame to the Bad Faith Subgame, the Tortfeasor-Forced Trial Subgame, or the Trial Subgame, it is necessary to understand how each of these subgames functions.

2. *The Settlement Subgame*

The Settlement Subgame is depicted in extensive form in Figure 3. *I* and *T*, knowing the amount for which the case has settled, now engage in coverage litigation. That is, the court decides whether, given the type of lawsuit brought by *V* against *T*, and given the contours of the liability insurance contract, *I* owed a duty to indemnify *T*. Although the players do not know in advance how the court will decide that issue, they share an estimate based on their understanding of the facts and the terms of the liability insurance contract as to the likelihood the court will find coverage to exist.[41] At the end of the coverage litigation, the game is over and *I*, *T*, and *V* add up their losses (including modest attorneys' fees[42]) and gains.

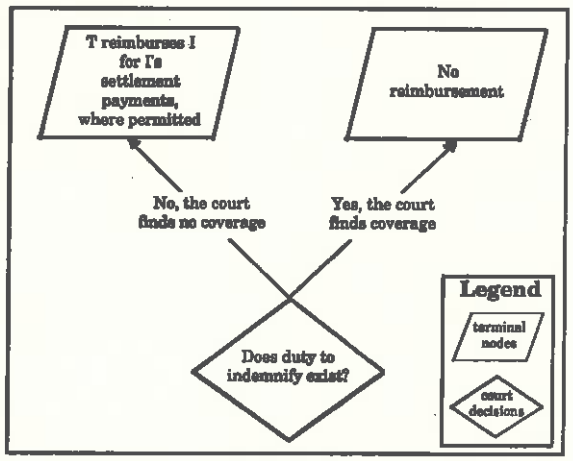


Figure 3: The Settlement Subgame

41. To use the typology described by Professor Eric Rasmusen in his influential study of game theory, the Settlement Subgame is one of incomplete, symmetric, and complete information. RASMUSEN, *supra* note 9, at 51-54.

42. This Article has assumed throughout that the parties follow the "American Rule" and generally bear their own attorneys' fees whether they win or lose. The relaxation of this assumption would not substantially alter the conclusions of this Article. *T* generally will not have any significant attorneys' fees in the Settlement Subgame because its interests are being protected by an attorney paid for by *I*. For simplicity, this Article has also assumed that, even upon a finding that *I* had no duty to indemnify *T*, *I* has no right to reimbursement of attorneys' fees.

3. *The Trial Subgame and the Tortfeasor-Forced Trial Subgame*

The extensive form for the Trial Subgame and the Tortfeasor-Forced Trial Subgame looks like Figure 4. The court hears *V*'s case against *T* on the merits and issues a judgment falling into one of three exclusive subsets of possible judgments. The court can issue a "defense judgment" in favor of the defendant *T*. The court can issue a "small judgment" against *T*. Small, in this context, means a judgment for an amount less than the policy limits. Alternatively, the court can issue a judgment that constitutes an "excess judgment," a judgment in an amount greater than the policy limits. If the court issues a defense judgment, the game is over and the parties ascertain their losses and gains.[43] If the court issues a judgment within the small judgment subset or the excess judgment subset, the players then play the "Post-Trial Coverage Litigation Subgame" to allocate the judgment amount between *T* and *I*. This

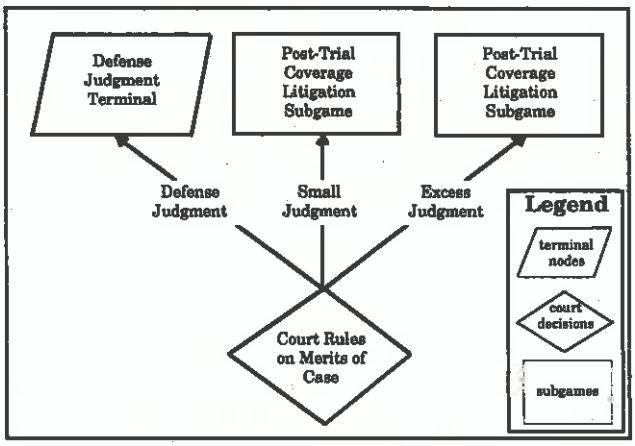


Figure 4: Extensive Form for the Trial Subgame and the Tortfeasor-Forced Trial Subgame

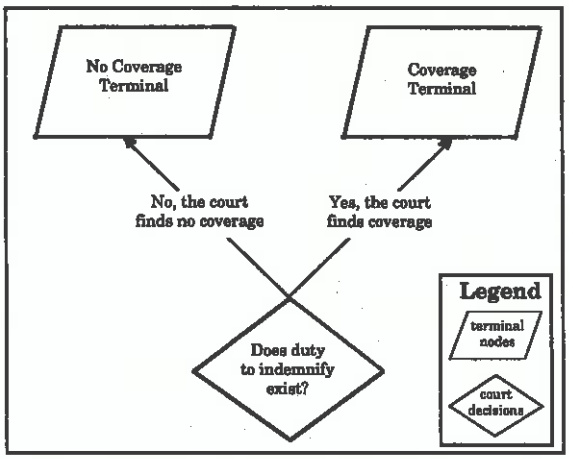


Figure 5: Post-Trial Coverage Litigation Subgame and the Post-Forced-Trial Coverage Litigation Subgame

43. Losses in the Trial Subgame and the Tortfeasor-Forced Trial Subgame include more substantial attorneys' fees incurred by *V* and *I*.

subgame, illustrated in Figure 5, is similar to the Settlement Subgame in that its main function is to allocate liability to V between I and T. Unlike the Settlement Subgame, however, I will have no right to seek reimbursement from T upon a finding of coverage. I has no such right because prior to the coverage determination it did not satisfy the judgment or otherwise irrevocably commit funds to V.[44]

The difference between the Trial Subgame and the Tortfeasor-Forced Trial Subgame relates only to the payoff received by T at the end of the game. Many contracts either explicitly or implicitly prohibit the insured from rejecting settlement offers for less than the policy limits. This prohibition is modeled here by drastically punishing T for so acting when the players are playing the Tortfeasor-Forced Trial Subgame but not when they are playing the Trial Subgame.

4. *The Bad Faith Subgame*

The Bad Faith Subgame is considerably more complex. As illustrated in Figure 6, the game starts with a trial on the merits identical to that played in the Trial Subgame. If a defense judgment is issued, the game is over and the parties determine their losses and gains. If the court renders a judgment falling within the small judgment subset (one less than the policy limits), the players continue with the Post-Trial Coverage Litigation Subgame, just as they did at the end of the Trial Game. If the judgment rendered is within the excess judgment subset, however, the parties now play the "Noncooperative Bad Faith Trial Subgame" illustrated in Figure 7.[45]

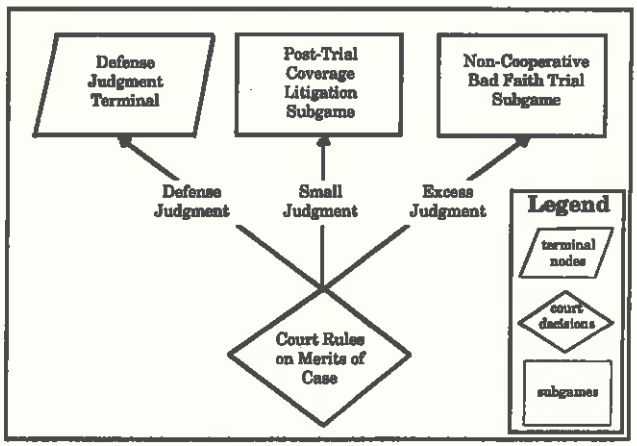


Figure 6: Extensive Form for the Bad Faith Subgame

In the Noncooperative Bad Faith Trial Subgame, the

44. Like the Settlement Subgame, the Trial Subgame is one of uncertain but symmetric and complete information. *See supra* note 41.

45. This Article assumes that V and I expect to incur substantial attorneys' fees whenever they play the Bad Faith Subgame.

court begins by examining the legitimacy of any claims by *I* that it has no duty to indemnify *T*. The court can find that *I* has no duty to indemnify *T*, that it has a duty to indemnify *T* but that its position as to coverage was "fairly debatable," or that *I* has a clear duty to indemnify *T*. The parties do not know in advance how the court will decide this issue, though they share an assessment of the probabilities of the court reaching each of these determinations. If the court finds that *I* had a duty to indemnify *T*, clear or otherwise, the court will then go on to determine whether *I*'s rejection of the settlement proposal breached the duty to settle. Again, the parties do not know in advance how the court will decide the breach issue. Based on their understanding of the facts of the case and applicable law, however, they share an assessment of how likely the court is to find the rejection of the settlement offer to have constituted a breach. At the conclusion of the Noncooperative Bad Faith Trial Subgame, the game is over and the parties ascertain their losses and gains.[46]

46. Readers knowledgeable about the actual practice of bad faith litigation may be troubled by the failure to incorporate the possibility that *V* will bargain with *T* to purchase all or part of *T*'s cause of action against *I*, in exchange for a complete or partial release of *T*'s obligation to *V*. Such arrangements are, in fact, reached quite frequently. *See, e.g.*, Decker v. Lindsay, 824 S.W.2d 247 (Tex. Ct. App. 1992). As it turns out, however, the possibility *T* and *V* might bargain over the matter and the accompanying conversion of the "game" into a partly cooperative one does nothing to change the conclusions in subpart III(A) of this Article and only fortifies the conclusions reached in subpart III(D). The assumption that *T* and *V* cannot bargain with each other is relaxed in subpart III(E) of this Article.

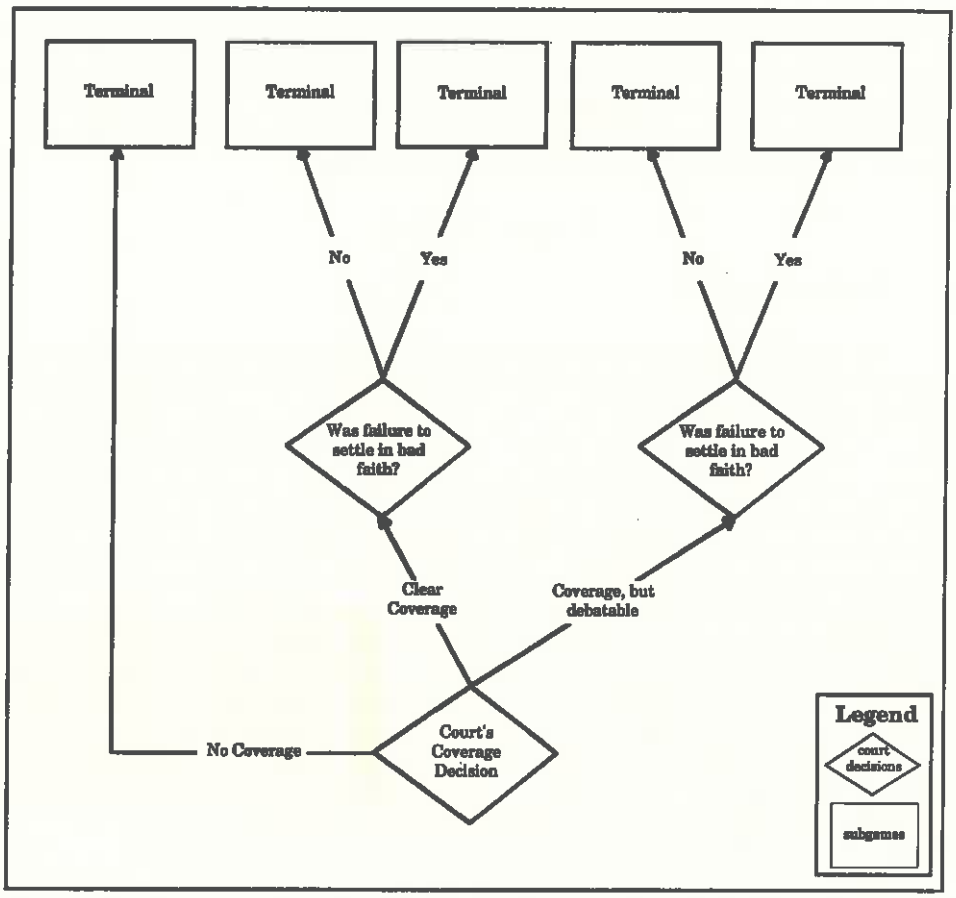


Figure 7: Extensive Form for the Noncooperative Bad Faith Trial Subgame

III. HOW IMPOSITION OF A DUTY TO SETTLE ALTERS EQUILIBRIUM SETTLEMENT VALUES

This Article now determines which settlement proposals all of the players would accept for each set of legal rules regarding a duty to settle.[47] Such

47. This Article will not attempt in any rigorous fashion to "purify" matters further and determine which, if any, of these settlement equilibria will in fact be selected. Guidance as to the solution to this problem may be found in several works. *See, e.g.*, BIERMAN & FERNANDEZ, *supra* note 27, at 101-17; AVINASH K. DIXIT & BARRY J. NALEBUFF, THINKING STRATEGICALLY 286-301 (1991) (discussing the strategy of looking ahead and reasoning back in the context of the bargaining process); *id.* at 290 (concluding in general, "the better a party can do by itself in the absence of an agreement, the higher will be its share of the pie that is the subject of the bargaining"); RASMUSEN, *supra* note 9, at 227-38 (analyzing the "Splitting a Pie" game). The literature suggests, however, that the actual settlement reached will increase as the maximum settlement acceptable to one of the sides increases.

settlements are called "Settlement Equilibrium Proposals." This part of the Article investigates whether permitting a cause of action for breach of the duty to settle, or, for example, awarding treble damages for breach of the duty to settle, alters the range of settlement proposals that will constitute Settlement Equilibrium Proposals. The point, in short, is to see how the contours of insurance law shape underlying tort litigation.

A. *Basic Analysis*

1. *The Normal Form*

The process of hunting for Settlement Equilibrium Proposals begins by transforming the game described in the prior section from "extensive form" to "normal form," or "strategic form," as it is sometimes called. In general, a normal form or strategic form arrays the possible strategies available to each player in the game and identifies for each resulting strategy combination each player's expected utility or information from which the expected utility of the players can be derived.[48] The normal form therefore suppresses information about the role of random forces or precise move sequences in determining payoffs and facilitates focusing simply on each player's strategies.[49]

Table 1 demonstrates a normal form for the model employed. The table shows the subgame played as the result of all eight strategy combinations available in the main game. An inspection of the table shows that a settlement proposal constitutes a Settlement Equilibrium Proposal if and only if (1) *V* prefers the Settlement Subgame to the Trial Subgame, (2) *I* prefers the Settlement Subgame to the Bad Faith Subgame, and (3) *T* prefers the Settlement Subgame to the Tortfeasor-Forced Trial Subgame.

---

48. *See generally* KREPS, *supra* note 31, at 355-462 (rigorously describing normal form); Shubik, *supra* note 37, at 67-76 (1982) (providing description of normal form). For games with n players each of whom can employ two strategies, there are 2^n strategy combinations over which the utilities must be calculated.

49. This Article does not attempt, however, to use the intriguing but still evolving "Theory of Moves," which further abstracts from the normal form. *See* Steven J. Brams, *Theory of Moves: Overview and Examples*, 12 CONFLICT MGMT. & PEACE SCI. 1 (1993) (noting also that current theory is best suited to two-person games).

	Victim Rejects Proposal		Victim Accepts Proposal	
	Insurer Rejects Proposal	Insurer Accepts Proposal	Insurer Rejects Proposal	Insurer Accepts Proposal
Tortfeasor Rejects Proposal	Tortfeasor-Forced-Trial Subgame	Tortfeasor-Forced-Trial Subgame	Tortfeasor-Forced-Trial Subgame	Tortfeasor-Forced-Trial Subgame
Tortfeasor Accepts Proposal	Trial Subgame	Trial Subgame	Bad Faith Subgame	Settlement Subgame

Table 1: Normal Form for Main Game

Figures 8 through 10 illustrate how the criteria for Settlement Equilibrium Proposals derived from the normal form can actually be applied. The technique is to vary the amount of a settlement proposal and to show, for each of the players, how the Settlement Subgame compares with each player's alternative strategy choice. It is assumed, for the sake of initial analytic simplicity, that (1) the law effectively imposes no duty on *I* to settle the case, (2) *T* has no duty to reimburse *I* for any amount *I* pays in settlement in the absence of coverage, (3) *T* is financially responsible even for a gigantic judgment, and (4) *T* is 100% certain *I* must indemnify *T* in conformity with the liability insurance contract if *T* is held liable to *V*. The analysis begins in this fashion, not because the assumptions are particularly realistic, but because it exposes the methodology used throughout this Article and because it provides a baseline for determining the impact of the duty to settle in its many variations.

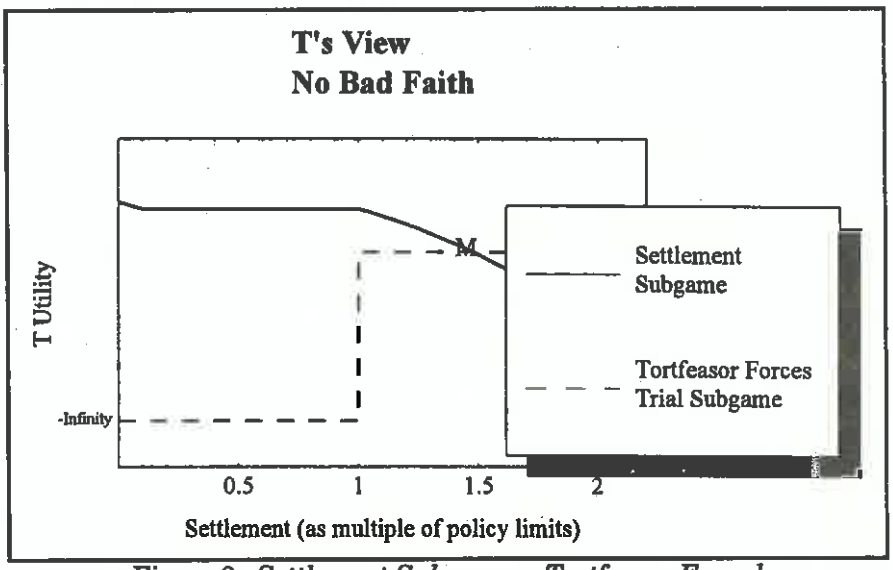


Figure 8: Settlement Subgame v. Tortfeasor-Forced Trial Subgame—No Duty to Settle.

Figure 8 illustrates the choice *T* faces as the size of the settlement proposal varies. In the Settlement Subgame, *T*'s happiness declines as the settlement proposal increases to the deductible amount, here about ten percent of policy limits.[50] This decline occurs because the settlement is coming entirely out of *T*'s pocket. From the deductible amount to the policy limits, *T*'s happiness remains constant because *I* is now picking up the additional settlement payments. As the settlement proposal increases beyond the policy limits, *T*'s happiness declines rapidly because *T* now pays increasingly precious funds out of its own pocket to settle the case. *T*'s happiness in the Tortfeasor-Forced Trial Subgame is infinitely negative for settlement offers less than policy limits, but identical to its happiness under the Trial Subgame for settlement offers equal to or exceeding policy limits. *T*'s happiness in the Trial Subgame is its expected disutility associated with probable judgments in the case against it. This number is likely to be small, given *I* will generally be paying a substantial portion of the judgment. In Figure 8, point M represents the maximum settlement proposal for which *T* will prefer the Settlement Subgame to the Tortfeasor-Forced Trial Subgame.

Figure 9 illustrates how *I*'s happiness depends on the size of the settlement proposal and the subgame resulting from players' strategy combination. In the Settlement Subgame, *I*'s happiness is constant for offers below the policy deductible because *T* is paying for settlements less than the deductible. It is again constant for offers in excess of policy limits because *T* is again

50. While 10% is an unusually large deductible, it is used here to make the graphs more readable. A smaller deductible would not alter the analysis in this Article.

paying each extra dollar in settlement. Between the deductible and policy limits, *I*'s utility decreases as the settlement proposal grows, because *I* is now picking up the cost of settlement. *I*'s expected utility in the Bad Faith Subgame is independent of the size of the settlement proposal because, in a legal regime in which no duty to settle exists, the amount of a rejected settlement proposal is irrelevant to the insurer. *I*'s expected utility is simply that associated with going to trial. It is a higher level of utility than would be the case had *I* written a policy without effective policy limits because policy limits enable *I* to treat judgments in excess of policy limits as if they were for the amount of policy limits. Point N is the maximum settlement proposal for which *I* will prefer the Settlement Subgame to the Bad Faith Subgame.

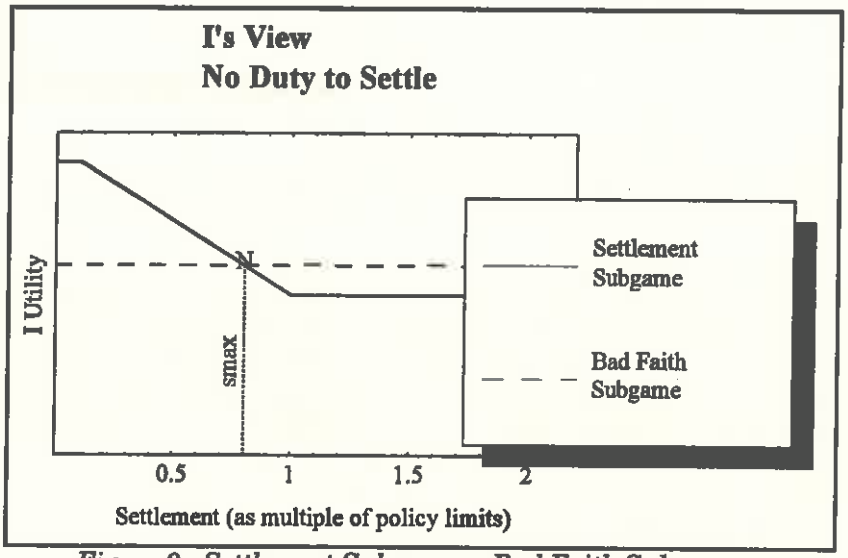


Figure 9: Settlement Subgame v. Bad Faith Subgame—No Duty to Settle

Figure 10 illustrates *V*'s position. For *V*, utility increases in the Settlement Subgame as the size of the settlement offer grows. *V*'s utility is constant in the Trial Subgame. It is simply the expected utility associated with the probable damage awards at trial—awards that, under this simple model, *V* knows will be paid in full. Point O represents the minimum settlement proposal for which *V* prefers the Settlement Subgame to the Trial Subgame.

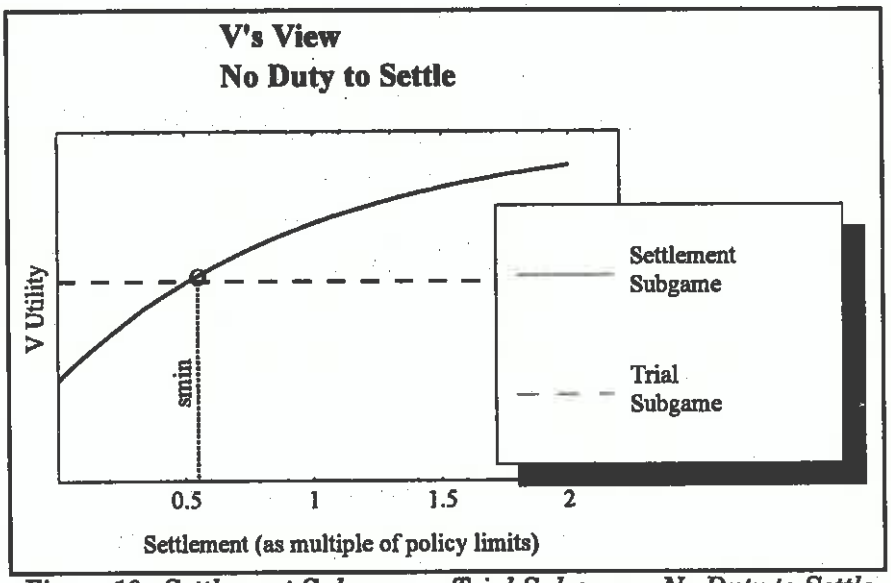


Figure 10: Settlement Subgame v. Trial Subgame—No Duty to Settle

With this background, one can now visualize the Settlement Equilibrium Proposals. Settlement proposals less than s_{min} (about fifty percent of the policy limits in this example) cannot be Settlement Equilibrium Proposals because *V* would then prefer the Trial Subgame to the Settlement Subgame. Settlement proposals greater than s_{max} (about seventy percent of the policy limits in this example) cannot be Settlement Equilibrium Proposals because *I* would then prefer the Bad Faith Subgame to the Settlement Subgame. Proposals between s_{min} and s_{max} constitute Settlement Equilibrium Proposals because *T* prefers the Settlement Subgame to the Tortfeasor-Forced Trial Subgame, *I* prefers the Settlement Subgame to the Bad Faith Subgame, and *V* prefers the Settlement Subgame to the Trial Subgame.

Although the above diagrams did produce Settlement Equilibrium Proposals, it is important to recognize that this result need not always occur. If, for example, *V* is not particularly risk averse or has a very optimistic view of its prospects in a trial against *T*, *V* will prefer the Trial Subgame to the Settlement Subgame unless the settlement proposal is very close to or even exceeds the actuarial value of the case. On the other hand, if there is a high probability that any judgment in *V*'s action against *T* will exceed the policy limits, or if *I* expects very low judgments, *I* will prefer the Settlement Subgame to the Bad Faith Subgame only for settlement proposals that are very low relative to the actuarial value of the case. Hence, there is no guarantee s_{min} will exceed s_{max}. Subpart III(C) of this Article discusses equilibrium possibilities when no Settlement Equilibrium Proposal exists.

2. *Imposition of a "Simple" Duty to Settle with a Financially Responsible Tortfeasor*

The above analysis can be readily modified to accommodate the existence of a duty to settle. Imposition of a duty to settle does not in and of itself alter the outcome of the Trial Subgame, the Tortfeasor-Forced Trial Subgame, or the Settlement Subgame. Thus, T and V make precisely the same decisions regarding settlement proposals as they did when no duty to settle existed. S_{min} therefore remains unchanged by imposition of a basic duty to settle. Imposing a duty to settle, however, does alter the outcome of the Bad Faith Subgame. It therefore has the potential to eliminate the existence of any Settlement Equilibrium Proposal or to alter the range of settlement proposals constituting Settlement Equilibrium Proposals.

Figure 11 illustrates the effect of imposing a duty to settle. Punishing I for rejecting "reasonable" settlement offers always hurts I so long as I chooses to play the Bad Faith Subgame. The decline in I's utility is greater when the settlement proposal is low, because there is then a greater probability that a court will find rejection of the settlement offer to have constituted a breach of the duty to settle. Indeed, as set forth in the technical appendix, for any settlement offer, I's utility in the Bad Faith Subgame may be thought of as a weighted average of its utility if no breach of the duty to settle is found (that is, approximately the same level of utility that existed when no duty to settle existed) and its utility in the event a breach of the duty to settle is found. As the size of the rejected settlement proposal grows, the relative weight accorded to the "no breach" level of utility increases and I's overall utility level grows accordingly. Indeed, as settlement proposals become very large, I's position in the Bad Faith Subgame approaches its position in the Trial Subgame.

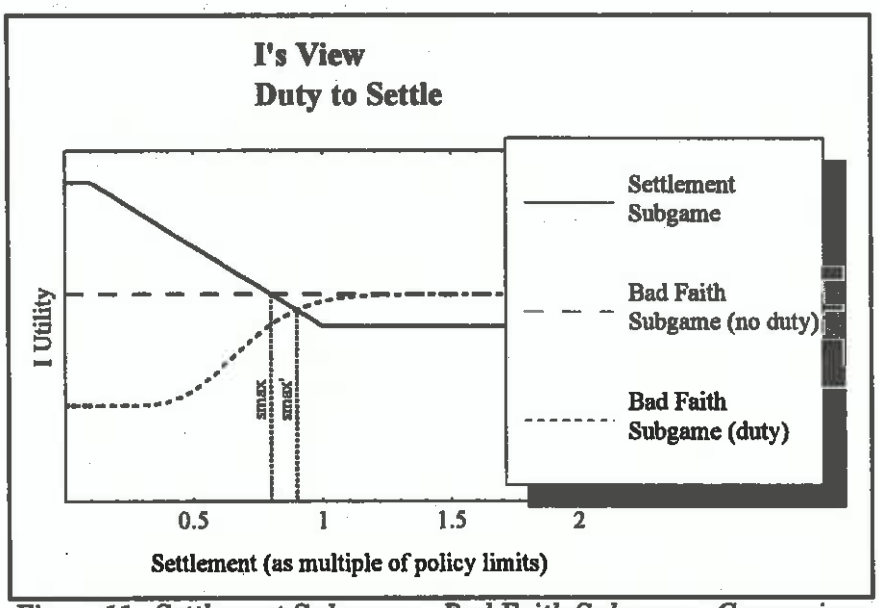


Figure 11: Settlement Subgame v. Bad Faith Subgame—Comparison of No Duty to Settle With Duty to Settle.

As shown in Figure 11, imposition of a duty to settle increases the maximum Settlement Equilibrium Proposal from s_{max} to $s_{max'}$. This increase leads to two of this Article's four major propositions:

PROPOSITION 1: Imposition of a duty to settle increases the proportion of cases involving insured tortfeasors that can be resolved by settlement. Imposition of a duty to settle therefore decreases the "tertiary costs"[51] associated with litigation for those cases in which the insurer is defending its insured.

PROPOSITION 2: Imposition of a duty to settle is likely to increase on balance the overall amount for which cases involving insured tortfeasors settle. The compensation of victims injured by insured tortfeasors should therefore increase.[52]

---

51. The term "tertiary costs" is borrowed from GUIDO CALABRESI, THE COSTS OF ACCIDENTS 225-26 (1970), and refers simply to the cost of resolving disputes.

52. One might wish to jump from these two conclusions to hypotheses involving the price of liability insurance and the overall level of victim compensation. Such a leap in logic, however, proves treacherous. *See infra* text accompanying notes 63-65.

B. *Factors that Alter the Impact of the Duty to Settle*

Studying Figure 11 yields considerable insight into how insurance law guides the outcome of litigation between a victim and an insured tortfeasor. More specifically, it shows how variations in the law relating to imposition of a duty to settle alter the range of Settlement Equilibrium Proposals. An understanding of the range of Settlement Equilibrium Proposals, in turn, suggests the extent to which cases will be resolved by settlement rather than by trial and the extent to which victims will be compensated for injuries inflicted by an insured tortfeasor. Six propositions emerge from Figure 11.

1. *The Punishment for Breach of the Duty to Settle*

As illustrated in Figure 12, legal changes that heighten the punishment for breach of the duty to settle generally increase s_{max}, the maximum Settlement Equilibrium Proposal. Indeed, if the actuarial value of a case is high relative to the policy limits, and if the court determines the reasonableness of settlement offers with explicit or implicit reference to actuarial values, a heightened punishment for breach of the duty to settle will permit Settlement Equilibrium Proposals that are greater than the policy limits and the actuarial value of the case. The increase in the maximum Settlement Equilibrium Proposal from s_{max} to s_{max}' exists because (1) the Bad Faith Subgame is now less attractive to *I* than before, (2) there is no change in the comparative attractiveness of the Settlement Subgame to the Tortfeasor-Forced Trial Subgame for *T*, and (3) there is no change in the comparative attractiveness of the Settlement Subgame to the Trial Subgame for *V*.

T's preferences as between the Settlement Subgame and the Tortfeasor-Forced Trial Subgame limits, however, the increase in the maximum Settlement Equilibrium Proposal occasioned by heightened punishment for breach of the duty to settle. For sufficiently high settlement offers, *T* may be willing to gamble on a favorable result in its trial against *V* rather than face the certain financial catastrophe associated with contributing its large contractual share to settle a case for an amount in excess of policy limits.[53] High settlement offers will not resolve the case because, even though *I* is willing to accept the proposal in order to avoid the risks associated with the Bad Faith Subgame, *T* is not.

---

53. Indeed, a body of psychological research known as "prospect theory" suggests when faced with a choice framed as the certainty of a small loss versus a gamble as to a large loss, most people prefer the risky choice. *See generally* RATIONAL CHOICE (Robin M. Hogarth & Melvin W. Reder eds., 1986) (collecting essays summarizing research and implications).

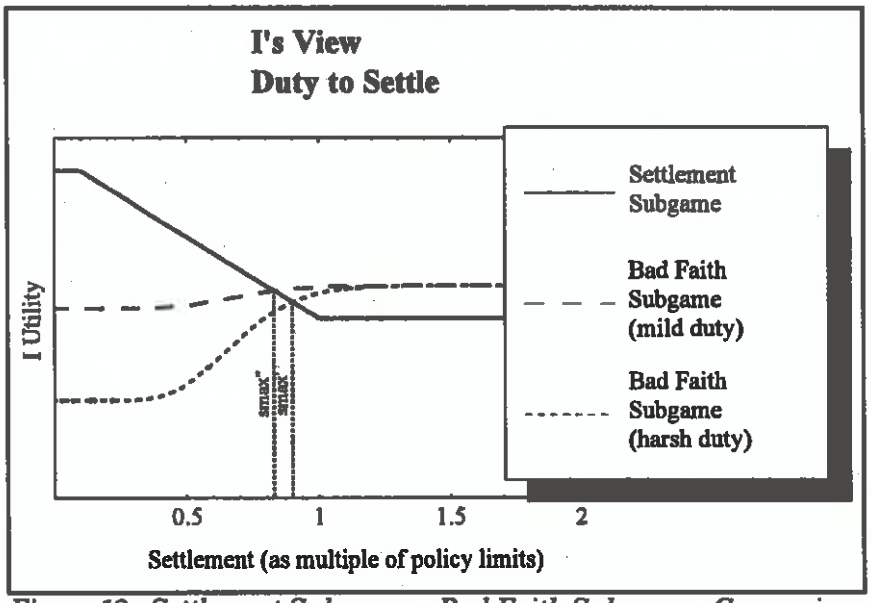


Figure 12: Settlement Subgame v. Bad Faith Subgame—Comparison of Mild Bad Faith Remedy to Harsh Bad Faith Remedy.

2. *The Relationship Between the Policy Limits and Likely Damage Awards*

As illustrated in Figure 13, reducing the policy limits relative to the distribution of possible damage awards in *V*'s action against *T* increases the effect caused by the duty to settle described previously. The duty to settle has a comparatively greater impact on low-limits policies because it eliminates the insurer's ability to treat excess judgments as policy-limits judgments for a broader spectrum of possible judgments.[54] Prior to imposition of a duty to settle, low-limits policies depressed s_{max} far more than high-limits policies. Imposition of a duty to settle reduces this disparity by treating equally the low-limits and the high-limits policies in the event that *I* rejects a reasonable settlement offer. Imposition of a duty to settle is therefore likely to increase the price of low-limits liability insurance comparatively more than high-limits liability insurance.

54. Although *I* can similarly discount these excess judgments even in the face of a duty to settle, the discount is less because there is some positive probability a court will find rejection of a settlement offer to have been in bad faith and for *I*, therefore, to be faced with having written an insurance policy without effective policy limits.

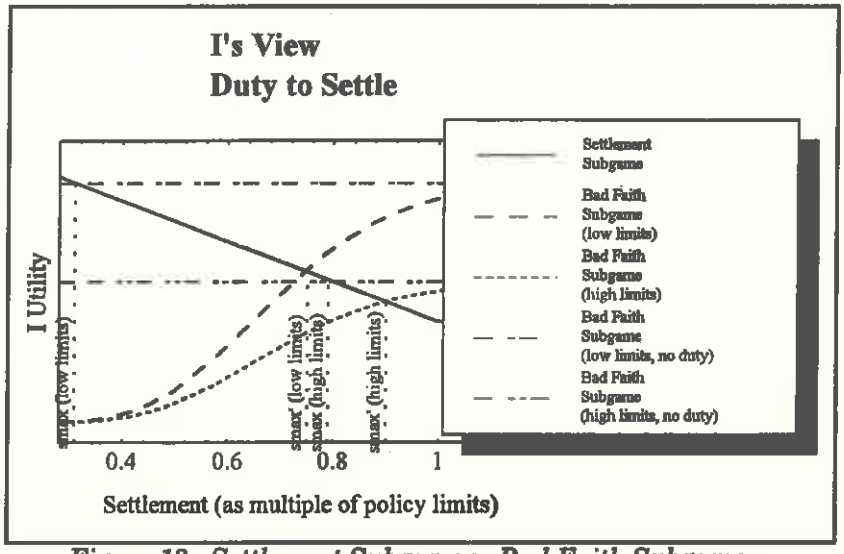


Figure 13: Settlement Subgame v. Bad Faith Subgame—Comparison of High Policy Limits to Low Policy Limits

3. *The Size of Settlement Offers that Trigger the Duty to Settle*

As illustrated in Figure 14, leniency on the part of courts towards insurers as to what constitutes a reasonable settlement offer decreases s_{max}. This decrease occurs because, for at least some settlement proposals, the Bad Faith Subgame is now comparatively more attractive to *I* than it was when *I* worried more that a court would hold its rejection of the proposal to constitute bad faith. Alterations of the law relating to what constitutes a reasonable settlement offer do not change the Settlement Subgame, the Trial Subgame, or the Tortfeasor-Forced Trial Subgame, and therefore do not alter s_{min}. Leniency toward insurers in the definition of a reasonable settlement offer thus tempers the effects identified above of imposing a duty to settle.

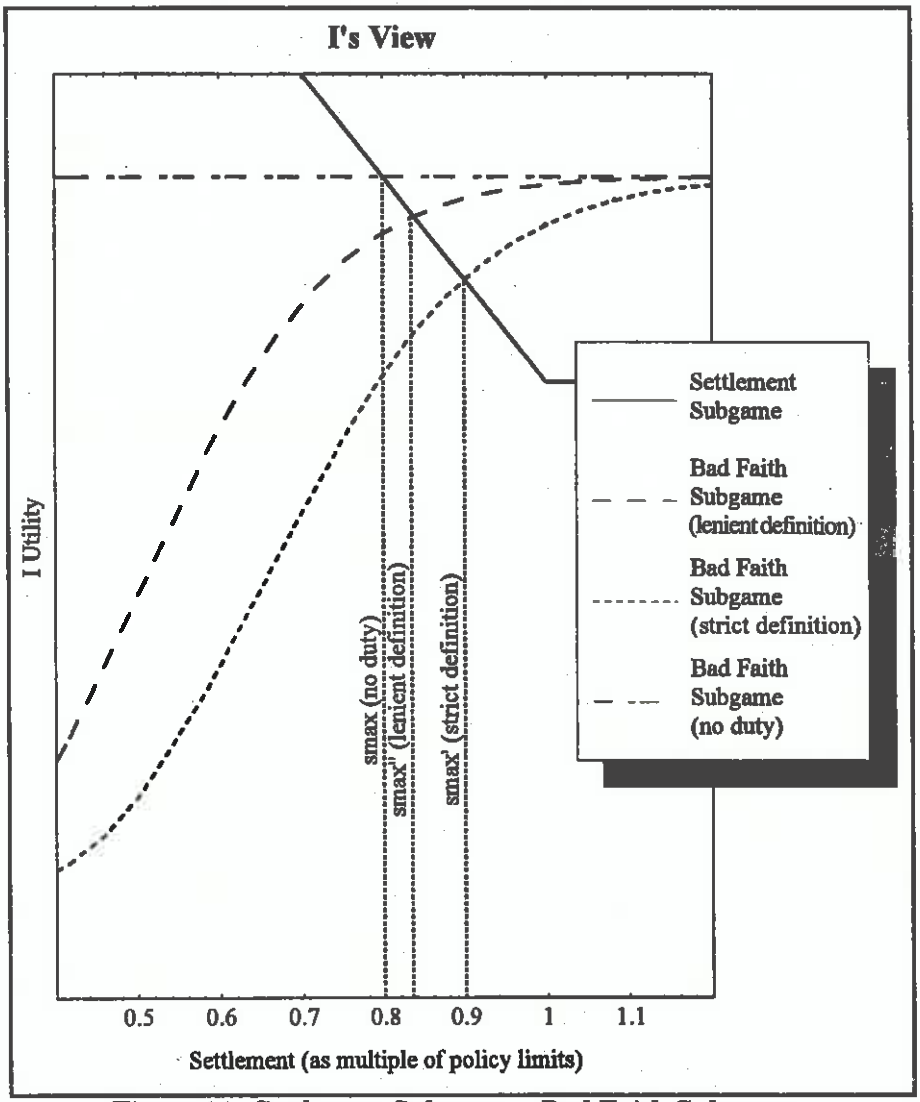


Figure 14: Settlement Subgame v. Bad Faith Subgame— Comparison of Lenient Definition of "Reasonableness" with Harsh Definition

4. *The Insurer's Difficulty in Predicting the Size of Settlement Offers that Trigger the Duty to Settle*

As illustrated in Figure 15, difficulty on the part of *I* to predict what a court will consider to be a reasonable settlement in a given case has an indeterminate effect on s_{max}. In jurisdictions relatively tough on insurers, an

inability to predict how a court would rule in a particular case generally[55] decreases s_{max}. This decrease occurs because, for small settlement offers, *I* sees a better chance that its rejection will not lead inexorably to imposition of liability for breach of the duty to settle. In jurisdictions relatively lenient toward insurers, however, an inability to predict how a court would rule in a particular case generally increases s_{max}. The increase occurs because a heightened chance new exists that rejection of some settlement offers will result in imposition of bad faith liability.

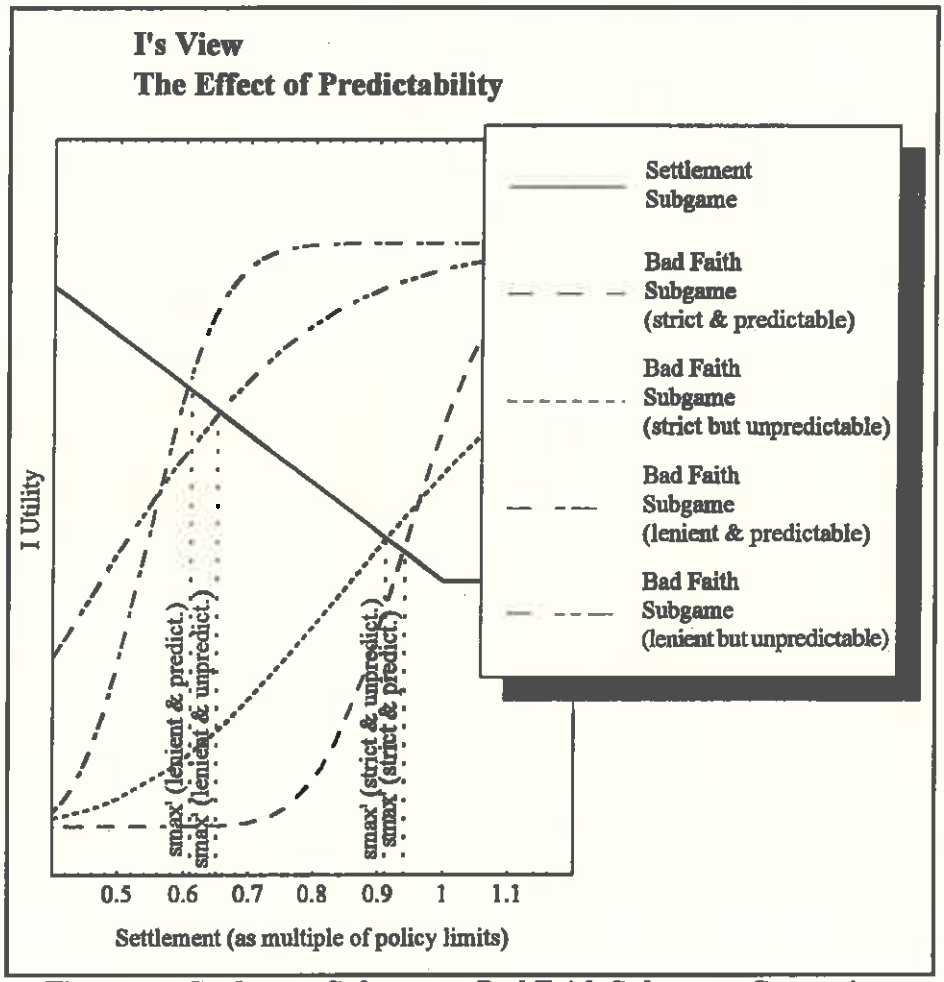


Figure 15: Settlement Subgame v. Bad Faith Subgame—Comparison of Predictable Court with Unpredictable Court

55. The "generally" qualifier is required, because if *T*'s preferences are constraining the maximum Settlement Equilibrium Proposal, judicial unpredictability may have no effect at all on the maximum Settlement Equilibrium Proposal.

5. *Ambiguity as to Whether an Occurrence is Covered by the Liability Insurance Policy*

Thus far, it has been assumed that *I* has a clear duty to indemnify *T*; the only probabilities the parties must consider in evaluating the various subgames are the results of *V*'s trial against *T* and the results of any subsequent trial for breach of the duty to settle. This assumption has the virtue of simplifying exposition of the model. In most cases, however, at least some question exists as to whether *I* has a duty to indemnify *T* for a given occurrence for which *T* may be liable. Perhaps *T*'s conduct falls within an exclusion of the policy, perhaps *T* has failed to comply with the notice and cooperation conditions of the policy, or perhaps an ambiguity exists as to whether *T* is an insured at all. This Article now explores the effects of variations in the duty to settle in the face of coverage ambiguities. As it turns out, the effect of coverage ambiguity depends mainly on the extent to which *T* is financially responsible and the extent to which the law entitles *I* to reimbursement from *T* for amounts paid in settlement when a court later determines in the Settlement Subgame *I* indeed had no duty to indemnify *T*.

a. *Financially Responsible Tortfeasor; No Right of Reimbursement.* If *T* is financially responsible, coverage ambiguities will have no effect on s_{min}. There is an absence of any effect because coverage ambiguities do not alter the outcome of the subgames between which *V* must choose. The outcome of the Settlement Subgame is unaltered for *V* because, even if *I* proves it had no duty to indemnify *T*, that fact does not entitle *I* to recoup from *V* amounts paid in settlement. The Trial Subgame is unaltered for *V* because *T*'s obligation and ability to discharge any judgment against it is unaffected by any lack of liability insurance coverage.

Coverage ambiguities may affect s_{max}, however. Coverage ambiguities make the Bad Faith Subgame more attractive for *I* because now some positive probability exists that, whether it rejected a reasonable settlement offer or not, *I* has no obligation to indemnify *T* at all. Coverage ambiguities have no effect on the Settlement Subgame for *I*, however, because the absence of any right of reimbursement means a finding of no coverage will not entitle *I* to seek reimbursement from *T* for money it paid to *V* on *T*'s behalf. Hence, as illustrated in Figure 16, coverage ambiguities will generally reduce s_{max}.[56]

---

56. In the event it is *T*'s aversion to the Settlement Subgame that constrains s_{max}, coverage ambiguities may have no effect on s_{max}.

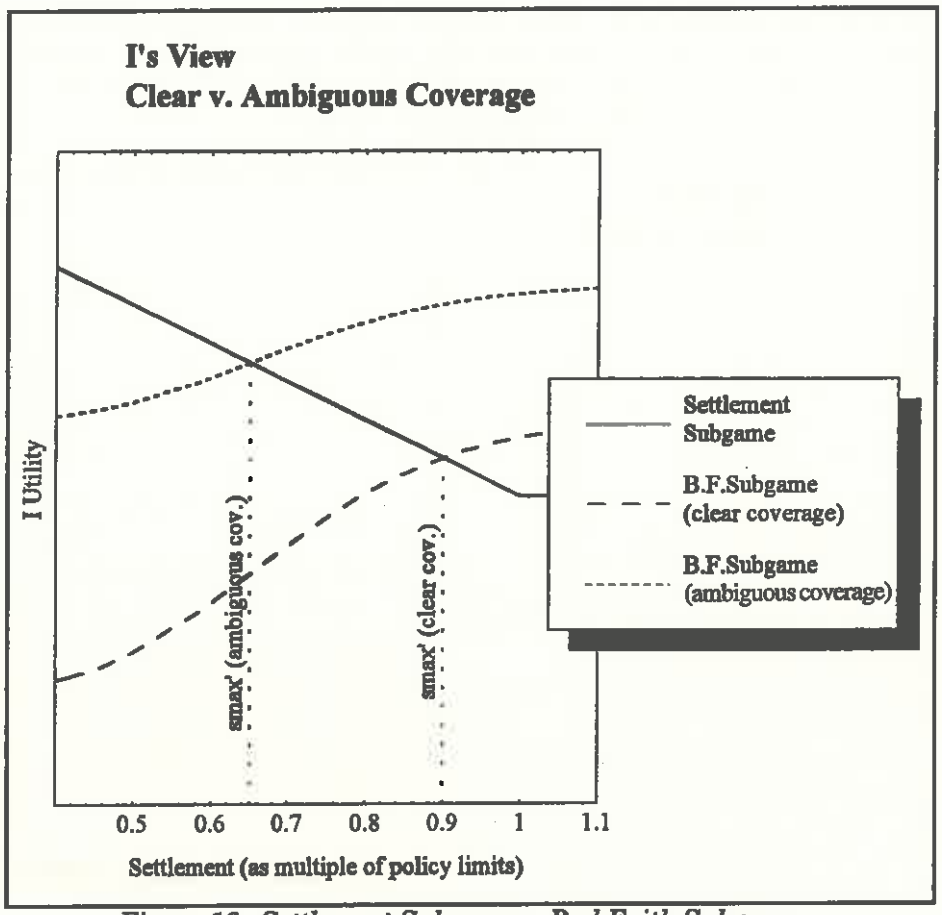


Figure 16: Settlement Subgame v. Bad Faith Subgame—Comparison of Undisputed Coverage with Ambiguous Coverage With Financially Responsible Tortfeasor But No Right of Reimbursement

b. *Financially Responsible Tortfeasor; Right of Reimbursement.* As shown in Figure 17, if T is financially responsible but the law gives I a right of reimbursement, coverage ambiguities should have no effect on s_{min} or s_{max}. The reason s_{min} is unchanged is outlined above. The reason s_{max} is unchanged is that, if T is completely financially responsible, coverage ambiguities equally increase the happiness of I whether it plays the Settlement Subgame or the Bad Faith Subgame. Either way, it may discount its expected payment by the likelihood that it will be found not to have any indemnity obligation at all. Financial responsibility coupled with a right of reimbursement means, then, that coverage ambiguities will not alter victim compensation or tertiary costs, but will result in a decline in liability insur-

ance premiums relative to the clear coverage scenario. *T* will be buying a less attractive insurance policy, but, in a competitive market, will be paying a lower price. *I* will be settling cases for roughly the same amount but will pay out less total settlement money than before.

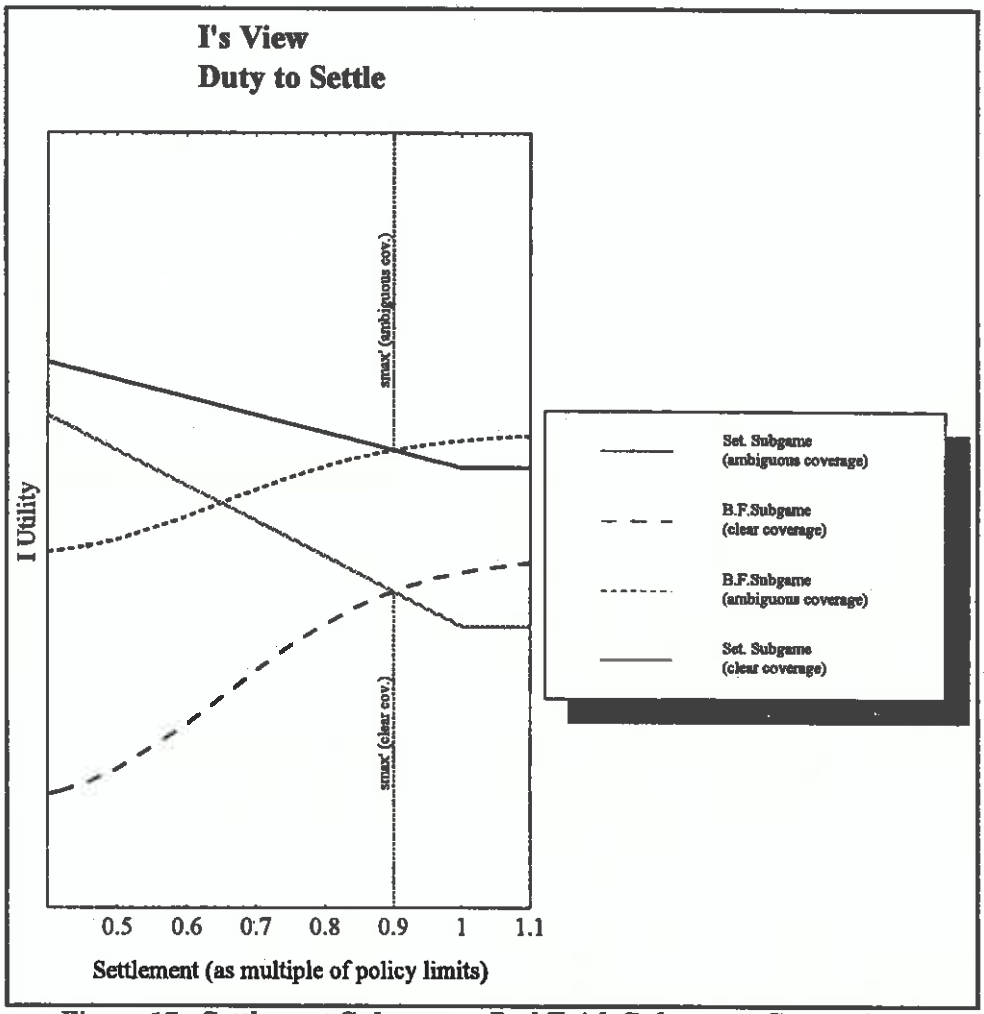


Figure 17: Settlement Subgame v. Bad Faith Subgame—Comparison of Clear Coverage with Ambiguous Coverage With Right of Reimbursement and Financially Responsible Tortfeasor

c. *Financially Irresponsible Tortfeasor; No Right of Reimbursement.* If *T* is not financially responsible for all possible damage awards the court might issue in *V*'s action against it, coverage disputes affect both s_{min} and s_{max}. They affect s_{min} because the absence of coverage decreases *V*'s happi-

ness from playing the Trial Subgame. There is now a risk that, even if V does well in the lawsuit, it will be unable to collect in full because, in the absence of effective liability insurance, T will lack the assets to satisfy the judgment. Figure 18 illustrates this point, showing that coverage ambiguities reduce the minimum Settlement Equilibrium Proposal from s_{min} to s_{min}'.

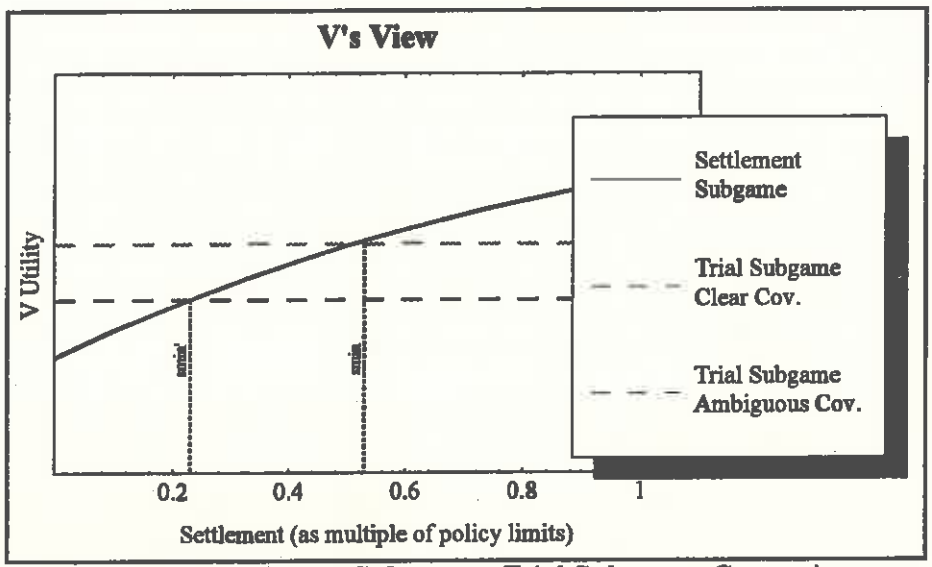


Figure 18: Settlement Subgame v. Trial Subgame—Comparison of Clear Coverage and Ambiguous Coverage With Financially Irresponsible Tortfeasor and No Right of Reimbursement

If there is no right of reimbursement, I's position in the Settlement Subgame and Bad Faith Subgame with a financially irresponsible tortfeasor is precisely the same as shown in Figure 16 with a financially responsible tortfeasor. T's wealth is irrelevant to I because I has no claim against T in any event. Thus, in this scenario, coverage ambiguity decreases s_{min} and generally decreases s_{max}.[57]

d. *Financially Irresponsible Tortfeasor; Right of Reimbursement.* Rules regarding the right of reimbursement and the effectiveness of that remedy have no effect on the minimum amount V will accept in settlement. T's wealth and the strength of V's case against T are the main determinants of s_{min}. The existence and effectiveness of a right of reimbursement does alter I's choice between the Settlement Subgame and the Bad Faith Subgame,

57. Again, there is an exception when I is willing to settle for amounts in excess of policy limits and when it is T's preference for the Trial Subgame relative to the Settlement Subgame that constrains s_{max}. *See supra* note 56.

however. The more effective the right of reimbursement, the more enjoyable *I* finds the Settlement Subgame. Thus, when *T*'s limited financial responsibility limits the practical effectiveness of the right of reimbursement, the Settlement Subgame becomes proportionately less attractive to *I*.

The magnitude of the decrease in s_{max} caused by coverage ambiguity depends on the extent of *T*'s financial irresponsibility. If *T* is destitute, the right of reimbursement is likely to be meaningless; coverage ambiguities may therefore cause s_{max} to suffer a significant decline, just as occurred when no right to reimbursement existed at all. If *T*'s financial irresponsibility means only an inability to pay fully on the largest judgments, the decline in s_{max} occasioned by coverage ambiguities will be smaller. Thus, although coverage ambiguities will heighten the attractiveness of the Settlement Subgame to *I*, they will not do so as much as when *T* was financially responsible. The Bad Faith Subgame will gain comparatively more from coverage ambiguities in this scenario than the Settlement Subgame. As a result, s_{max} will decrease, but, so long as *T* is not completely destitute, the decrease will be less than it was when no right of reimbursement existed at all.

6. *Excusing the Insurer from Its Duty to Settle Based on Its Erroneous but Reasonable Beliefs as to Coverage*

In Wisconsin, and perhaps other jurisdictions, an insurer predicating its refusal to accept an otherwise reasonable settlement offer on a belief that it had no duty to indemnify the insured may, under certain circumstances, be excused from its duty to settle.[58] If its coverage position was wrong but "fairly debatable," it will not be liable for extra-contractual damages, although it will remain liable for contract damages on the policy as drafted.[59]

Figure 19 compares the majority rule with the Wisconsin rule. In most jurisdictions, as set forth above, coverage ambiguities reduce the maximum Settlement Equilibrium Proposal from the settlement value at point A to the settlement value at point B. If a right of reimbursement exists and the insured is financially responsible, coverage ambiguities leave the maximum Settlement Equilibrium Proposal unchanged. If a right of reimbursement exists but the insured has limited financial responsibility, coverage ambiguities move the maximum Settlement Equilibrium Proposal from the settlement value at point A to the settlement values between points B and D. In Wisconsin, however, the Bad Faith Subgame is always more attractive to *I* than in the majority of jurisdictions. *I* now knows that even if its rejection of a particular settlement offer was "unreasonable," it may nonetheless be

58. *See supra* text accompanying note 19.

59. This is true at least when the insured has limited financial responsibility. In jurisdictions that give the settling insurer a right of reimbursement, coverage ambiguities should not excuse the insurer from any preexisting duty to settle when the insured is financially responsible.

excused from having to pay extra-contractual damages. If no right of reimbursement exists, the Wisconsin Rule coupled with ambiguity moves s_{max} from the settlement value at point A to the settlement value at point C. If a right of reimbursement exists and I is financially responsible, the Wisconsin Rule coupled with ambiguity moves s_{max} from the settlement value at point A to the settlement value at point E. If a right of reimbursement exists and T is not fully financially responsible, the Wisconsin rule moves s_{max} from the settlement value at point A to some value between that at C and that at E.

Thus, whether reimbursement is permitted or not, the Wisconsin rule will generally exacerbate the effect of coverage ambiguities on the already-predicted decrease in s_{max}. The consequence of the Wisconsin rule then is to increase tertiary costs by reducing the number of cases that settle, and to decrease the likely level of compensation received by victims of arguably insured tortfeasors.

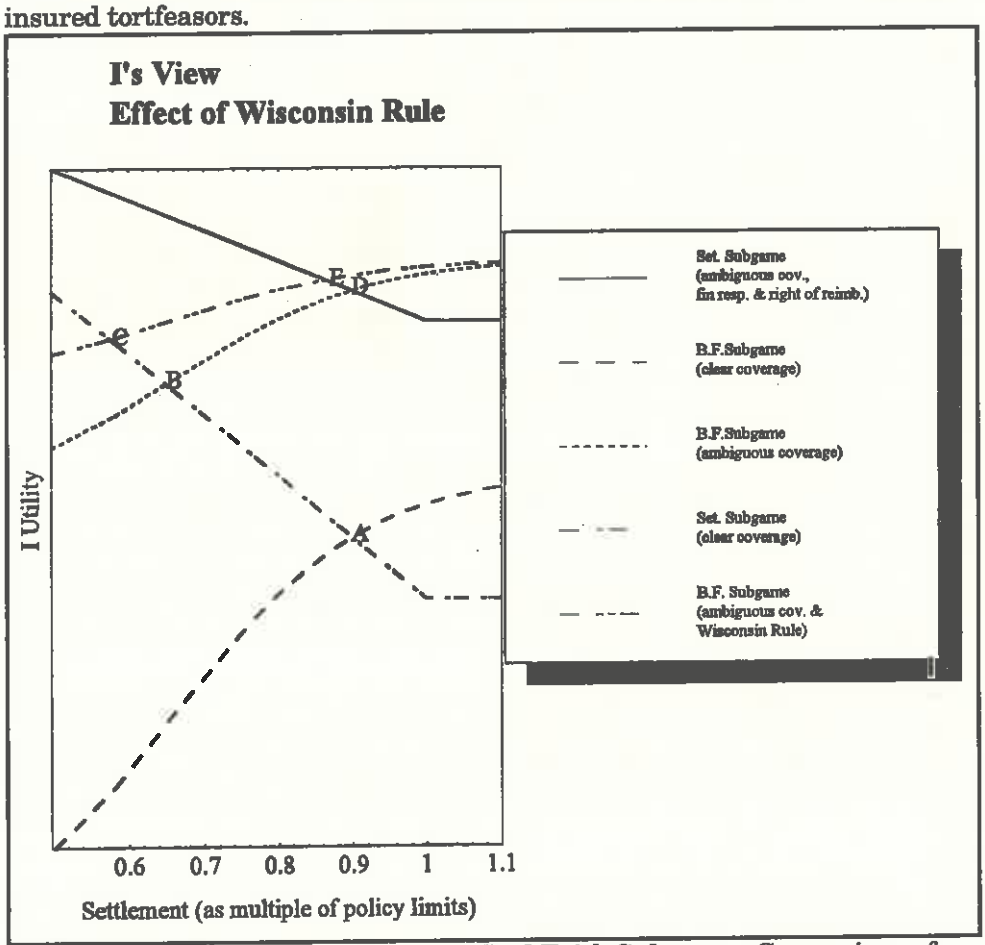


Figure 19: Settlement Subgame v. Bad Faith Subgame—Comparison of Majority Rule Regarding Excuse With Wisconsin Rule.

C. *The Effect of Variation in the Law Regarding the Duty to Settle on Scenarios for Which the Bad Faith Subgame Constitutes an Equilibrium*

1. *Finding Bad Faith Equilibrium Proposals*

Thus far, this Article has examined the effect of variations in the law regarding the duty to settle on the range of settlement proposals that will constitute a Settlement Equilibrium Proposal. As noted above, however, there may well be situations in which there is no settlement proposal that constitutes a Settlement Equilibrium Proposal. The absence of a Settlement Equilibrium Proposal is most likely when (1) V is not particularly risk averse, (2) V has a much more optimistic view of the outcome of its trial against T than does I, (3) the remedy for breach of the duty to settle is relatively mild, (4) courts are predictably lenient on insurers in evaluating what settlement offers are reasonable, and (5) coverage is ambiguous, T is financially responsible, and I has no right of reimbursement against T.

This subpart of the Article determines whether settlement proposals exist that constitute Bad Faith Equilibrium Proposals, that is, settlement proposals that will lead to a strategy combination that results in the Bad Faith Subgame. In conjunction with the preceding work on Settlement Equilibrium Proposals, it is then possible to predict with some confidence the effect of variations in the law relating to the duty to settle on the price of liability insurance, the overall levels of victim compensation, and the level of societal resources devoted to dispute resolution. This subpart will also explain otherwise mysterious strategies that the players in the game may pursue in an effort to attain or prevent the existence of a Bad Faith Equilibrium Proposal.

A review of Table 1,[60] in which the main game is depicted in normal form, shows that the Bad Faith Subgame constitutes an equilibrium when T prefers the Bad Faith Subgame to the Tortfeasor-Forced Trial Subgame, when I prefers the Bad Faith Subgame to the Settlement Subgame,[61] and when V prefers the Bad Faith Subgame to the Trial Subgame. Figures 20 through 22 show the range of settlement proposals that will satisfy these conditions.

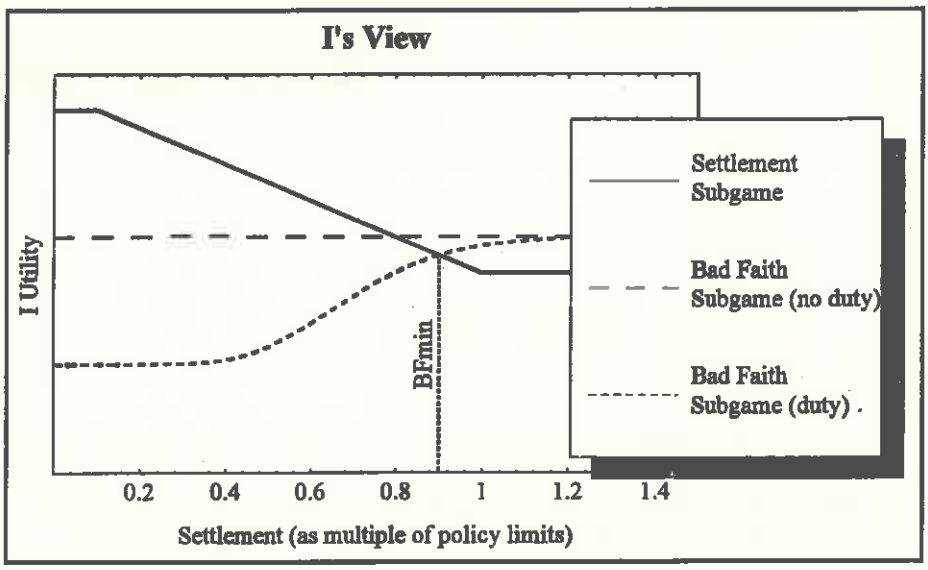
Figure 20 illustrates the circumstances under which I would prefer the Bad Faith Subgame. The Bad Faith Subgame is the best outcome for I for all settlement proposals exceeding BF_{min}, a point identical to s_{max}, the maximum amount for which I would settle. Thus, if there is any settlement pro-

60. *See supra* page 761.

61. This fact means as long as there is any settlement proposal that constitutes an Equilibrium Settlement Proposal, the Bad Faith Subgame should never be an equilibrium position.

posal less than s_{max} that constitutes a Settlement Equilibrium Proposal, there will not be a Bad Faith Equilibrium Proposal.

For T, the Bad Faith Subgame is preferred over the Tortfeasor-Forced Trial Subgame for all settlement proposals for which, when net legal fees are taken into account, acquisition of a cause of action for breach of the duty to settle has a positive value. As shown in Figure 21, T prefers the Bad Faith Subgame over the Tortfeasor-Forced Trial Subgame up until BF_{max}. It does so because T knows in the Bad Faith Subgame it acquires a cause of action for breach of the duty to settle. Acquisition of this cause of action is preferable to the expected outcome of the Tortfeasor-Forced Trial Subgame for all settlement offers less than policy limits and for settlement offers somewhat in excess of policy limits. As settlement offers above policy limits grow sufficiently large, however, the value of a cause of action for breach of the duty to settle diminishes because the chances for recovery are low and the chances for nonreimbursable legal fees are large. Thus, at some point (BF_{max}), T prefers rejecting the settlement to accepting it and obtaining a cause of action for breach of the duty to settle.[62] Thus, if T cannot trade its cause of action for breach of the duty to settle to a party that values it more, the maximum settlement proposal that will constitute a Bad Faith Equilibrium Proposal will be BF_{max}. If T can trade its cause of action, its utility under the Bad Faith Subgame may be even higher and BF_{max} may be greater.



62. If T, having accepted a settlement offer that V has accepted and I has rejected can later decline to pursue an action for breach of the duty to settle, it is hard to see any settlement proposals in excess of policy limits for which the Tortfeasor-Forced Trial Subgame is preferable to the Bad Faith Subgame. If T has this freedom, T's preferences will not place an upper limit on the settlement proposal constituting Bad Faith Equilibrium Proposals.

Figure 20: Bad Faith Subgame v. Settlement Subgame

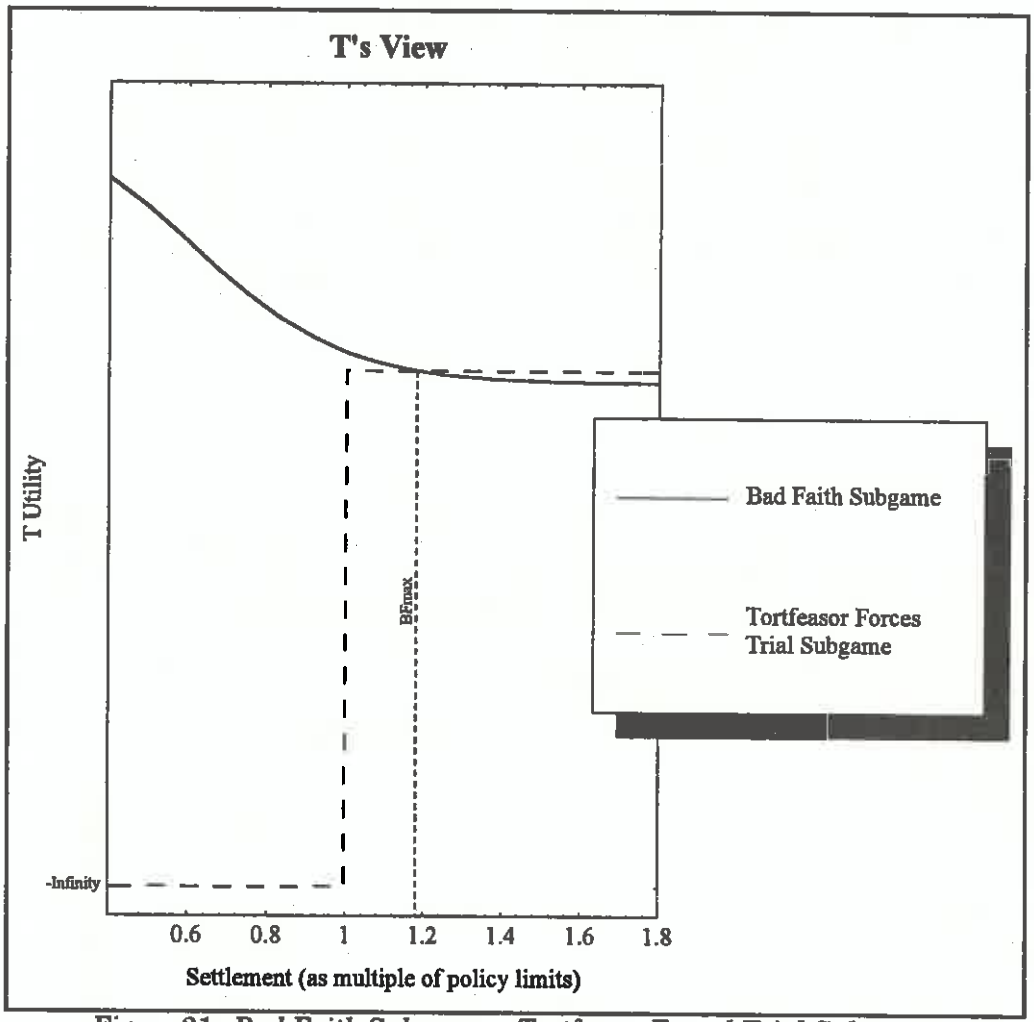


Figure 21: Bad Faith Subgame v. Tortfeasor Forced Trial Subgame

As shown in Figure 22, the Bad Faith Subgame is the preferred outcome for *V*; much of the time it is the preferred outcome for *T*. This similarity of interests exists because it is generally in *V*'s interest for *T* to be wealthier. A wealthy *T* means a greater possibility exists that *V*'s judgment will be enforced in full. The precise point at which *V* may prefer the Trial Subgame to the Bad Faith Subgame depends, however, on *V*'s level of risk aversion and may therefore differ from the point at which *T* no longer wishes to pursue the Bad Faith Subgame.

An important point to recognize is that BF_{max} will never be less than the policy limits. For settlement proposals less than the policy limits, T always prefers the Bad Faith Subgame to the Tortfeasor-Forced Trial Subgame. Thus, although either high legal fees associated with pursuit of the cause of action for breach of the duty to settle or modest remedies for breach of the duty to settle may drive BF_{max} down to the policy limits, it will not drive it lower. In conclusion, then, if there is some settlement proposal less than the policy limits I will not accept, and if there is no Settlement Equilibrium Proposal, there will be some settlement proposals that constitute a Bad Faith Equilibrium Proposal.

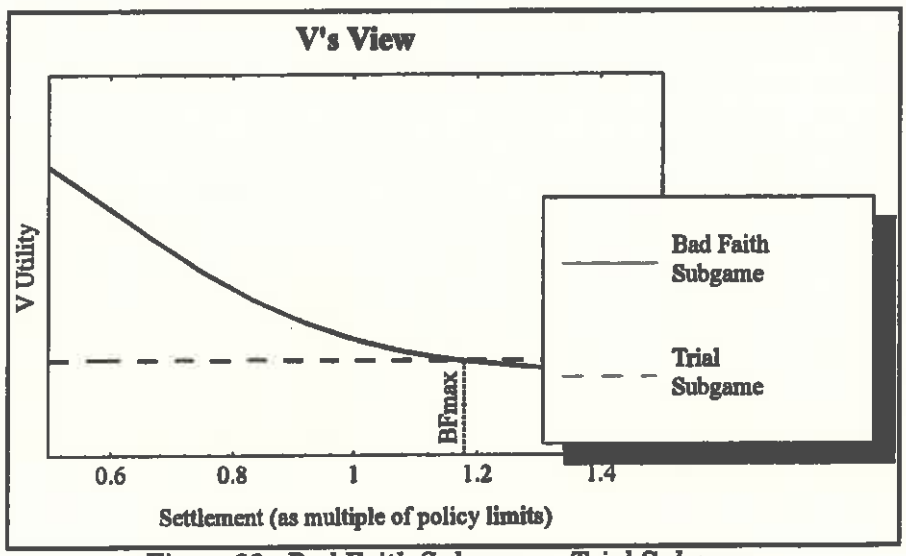


Figure 22: Bad Faith Subgame v. Trial Subgame.

2. *The Michigan Rule*

With this background, it is now possible to explore one final variant of the law relating to the duty to settle. At least two methods exist by which the law can require the insurer to indemnify the insured against the loss following an excess judgment resulting from the unreasonable rejection of a settlement offer. The majority rule computes the indemnity obligation based on a formula in which the net worth of T is irrelevant. The law requires I to pay T (or its assigns) as extra-contractual damages the difference between the excess judgment and the policy limits. The law therefore preserves T's financial position while placing no cap on V's potential recovery.

Michigan, and perhaps several other states, uses a method for computing *I*'s indemnity obligation in which *T*'s net worth does matter.[63] Under this minority approach, *I* must pay *T* (or its assigns) as extra-contractual damages the lesser of the difference between the excess judgment and the policy limits and the net worth of the insured.[64] Thus, if the policy limit was $100,000, the judgment was $250,000, and the insured had a net worth of $20,000, most jurisdictions would award $150,000 in damages for breach of the duty to settle. Michigan would award $20,000. The Michigan rule then releases *T* from any additional liability to *V*. *V*'s overall recovery in the action against *T* is therefore capped at the limits of the liability insurance policy plus *T*'s net worth.[65]

The operation of the Michigan rule depends on *T*'s wealth. When *T* is wealthy, the Michigan rule looks little different than the majority rule. When *T* is poor, however, the Michigan rule is similar to one that imposes a very weak duty to settle or that imposes no duty to settle. *I* will act selfishly, knowing its maximum exposure in cases when it breaches the duty to settle is to pay the minimal net worth of *T*. Fewer cases will settle and settlement values will be lower than in a jurisdiction following the majority approach.

When no Settlement Equilibrium Proposal exists, the Michigan rule leads to different outcomes than an abolition of the duty to settle. The Michigan rule gives *T* the same protection when the Bad Faith Subgame is played as do all rules that indemnify *T* against any excess judgment. As the probability that *I* has unreasonably rejected the settlement offer approaches 100%, *T* essentially suffers just the disutility of paying its deductible. Thus, *T* is happier than it would be when no duty to settle existed, in which case it is exposed to an excess judgment no matter what the size of the rejected settlement offer. By contrast, *V* is in much the same position under the

---

63. *See* Frankenmuth Mut. Ins. Co. v. Keeley, 461 N.W.2d 666 (Mich. 1990), *rev'g on reh'g* 447 N.W.2d 691 (Mich. 1989). The "perhaps" is necessary because, although the *Frankenmuth* opinion suggests the existence of other jurisdictions that have adopted an inferior strain of the Michigan approach known as the "prepayment rule," research reveals no court over the past 20 years that has applied this rule. Most if not all jurisdictions that used the prepayment rule abolished it. Thus, Michigan at this moment may stand alone in its reliance on the net worth of the tortfeasor in determining the measure of damages for breach of the duty to settle.

64. The Michigan rule differs from the prepayment rule in that the court does not condition the insurer's obligation on the insured actually having paid the victim its net worth (or any part thereof). In Michigan, the court instead estimates the net worth of the insured and compels the insurer to pay that amount to the victim. The *Frankenmuth* opinion leaves somewhat unclear, however, the extent to which changes in financial fortunes of the insured alter the insurer's obligation.

65. The Michigan rule is functionally equivalent to a third party beneficiary contract that a potential tortfeasor enters into with an insurer for the benefit of a prospective victim. The insurer agrees that if it breaches its duty to settle to the insured and the victim will release the insured from any liability in excess of the policy deductible, then the insurer will pay the victim the net worth of the insured as extra-contractual damages. If courts or regulatory officials would not prohibit such arrangements, insureds and insurers in other jurisdictions might be able to create a "do-it-yourself" Michigan approach and significantly cut insurance premiums.

Michigan rule as under a rule in which no duty to settle existed at all and *T* was poor. As a realistic matter, *V's* happiness is the same in the Bad Faith Subgame as in the Trial Subgame. Thus, the Michigan rule makes the insured better off but the victim worse off than the majority rule.

D. *Additional Conclusions Regarding the Duty to Settle*

In sum, Figures 20 through 22 establish that if no Settlement Equilibrium Proposal exists, *I* will end up somewhere on locus AB, *T* will end up somewhere on locus CD , and *V* will end up somewhere on locus EF. This Article therefore proves Proposition 3 and its four corollaries, along with a corollary of sufficient importance to be called Proposition 4.

PROPOSITION 3: If and only if no Settlement Equilibrium Proposal exists, there will generally be some range of settlement proposals that constitutes Bad Faith Equilibrium Proposals. Additional legal fees associated with pursuit of the cause of action for breach of the duty to settle, coupled with limitations on the remedy for breach of the duty to settle, place some upper bounds on the size of settlement proposals that constitute Bad Faith Equilibrium Proposals. For very high settlement proposals, the parties will prefer the Trial Subgame or the Tortfeasor-Forced Trial Subgame.

Corollary 1: Harsh Remedies for Breach of the Duty to Settle Make the Insurer Worse Off and the Insured Better Off When the Case Does Not Settle

Figures 20 through 22 confirm the unsurprising proposition that the harsher the remedy for breach of the duty to settle, the worse off is *I* for all Bad Faith Equilibrium Settlement Proposals and the better off is *T*. Although it cannot be predicted just how much worse off *I* will be or how much better off *T* will be without some sense as to the likely distribution of Bad Faith Equilibrium Settlement Proposals, *I* is in unavoidably worse shape and *T* is in unavoidably better shape.

Corollary 2: Imposition of a Duty to Settle Generally Increases the Overall Cost of Providing Liability Insurance

The overall effect on the insurer's costs of imposing a duty to settle is logically indeterminate, but, as a practical matter, is almost certain to drive costs up significantly. The effect on tertiary costs is likely to be minimal. A duty to settle will often cut tertiary costs because the insurer will settle more litigation against its insured without trial. Other times, however, imposition of a duty to settle will increase tertiary costs when the inability to find a Settlement Equilibrium Proposal compels the insurer to play the more expensive Bad Faith Subgame rather than the cheaper Trial Subgame. These marginal effects on tertiary costs—whatever their direction—are likely to be swamped, however, by the increase worked by the duty to settle in the range of Settlement Equilibrium Proposals and the amount the insurer pays when a

court finds it breached its duty to settle. As noted previously,[66] the increase in cost is likely to be greater for low-limits policies than for high-limits policies.

Corollary 3: Imposition of a Duty to Settle Generally Increases Liability Insurance Premiums

Imposition of a duty to settle is likely to increase the premiums insurers will charge for liability insurance. If the costs of liability insurers increase, it is logical to conclude that in the long run in a competitive insurance market, the price of liability insurance will rise as well. The price of low-limits insurance will rise to a greater extent than the price of high-limits insurance.

Corollary 4: The Overall Effect of the Duty to Settle on Victim Compensation Is Logically Indeterminate

The overall level of victim compensation depends substantially on the limits of liability of the insurance policies purchased by potential tortfeasors. If potential tortfeasors tend to select high-limits policies, victim compensation will be greater than if potential tortfeasors select low-limits policies or decline to purchase liability insurance at all. This Article has established that imposition of a duty to settle increases the cost of supplying all forms of liability insurance but increases the cost of supplying low-limits liability insurance more than high-limits liability insurance. It also increases the demand for liability insurance for any given premium and liability limits because the insured now faces a decreased risk associated with an excess judgment. Rather than face the relatively low level of utility associated with a Tortfeasor-Forced Trial Subgame Equilibrium, the insured now enjoys the higher level of utility associated with the Bad Faith Equilibrium Subgame.

The overall effect of a duty to settle on the types of insurance policies purchased depends, then, on the competing effects of an increase in the cost of supplying liability insurance coupled with an increase in demand for liability insurance. If demand for any given form of liability insurance—low-limits or high-limits—is greatly stimulated by an incorporation of the duty to settle, the amount of that form of liability insurance purchased might actually increase. If consumers of a given form of liability insurance regard the benefits of a duty to settle as marginal given competing uses of the premium dollar, however, incorporation of a duty to settle into the liability insurance policy might actually decrease the overall level of that form of liability insurance purchased.

Until such time as empirical studies or further theoretical analysis can discern the magnitude of these competing effects, it is difficult to use the goal of victim compensation to drive the content of the duty to settle in liability insurance policies. If the benefit that potential tortfeasors derive from imposition of a duty to settle is independent of the limits of liability of the policy

66. *See supra* text accompanying note 54.

otherwise preferred, imposition of a duty to settle will shift the portfolio of liability insurance policies toward high-limits policies, but may actually decrease the overall level of liability insurance policies purchased. Victim compensation would on balance decline. If the benefit that tortfeasors derive from imposition of a duty to settle is inversely related to the limits of liability on the policy otherwise preferred, imposition of a duty to settle will have a neutral effect on the portfolio of liability insurance policies sold in the marketplace and will have an undetermined effect on the overall level of liability insurance policies purchased. The overall effect on victim compensation is equally indeterminate.

PROPOSITION 4: Imposition of harsh penalties for breach of the duty to settle decreases the incentives for potential tortfeasors to exercise care and increases their incentive to sabotage settlements.

Thus far, this Article has assumed each of the player's valuations of the various subgames were "exogenous;" that is, the valuations were determined by knowledge obtained outside the game. For example, *I*'s estimate of the likelihood that an excess judgment would result if the case were taken to trial was assumed not to depend on any strategic behavior on the part of *T* or *V*. Rather, the players chose between the various subgames based on assumedly reliable information gained in discovery or otherwise about the prospects for liability and the likely amount of any damages awarded, coupled with knowledge about the relevant rules of tort law and insurance law.

The remedies available for breach of the duty to settle take on an entirely new importance, however, if *T* and/or *V* can structure *I*'s knowledge of the facts of the underlying tort action without running detectably afoul of the law. In short, this Article now considers how the remedies available for breach of the duty to settle might alter *T*'s incentive to be truthful in its dealings with *I*.[67]

---

67. To be sure, almost all liability insurance policies require the insured to "cooperate" with the insurer—though it is unclear whether this duty is an independent covenant by the insured or simply a condition on the performance by the insurer. Telling the truth to the insurer—or at least not telling a "material falsehood"—is an element of cooperation. Hurston v. Georgia Farm Bureau Mut. Ins. Co., 250 S.E.2d 886 (Ga. Ct. App. 1978); Sweet v. United States Fire Ins. Co., 340 N.Y.S.2d 957 (N.Y. Civ. Ct. 1973); *see also* Adrian P. Schoone & Michael M. Berzowski, *Liability Insurance: Effect of False Statements on Duty to Cooperate*, 52 MARQ. L. REV. 221 (1968) (summarizing earlier case law). There is probably some range of false messages the insured can send the insurer, however, without running detectably afoul of the duty to cooperate.

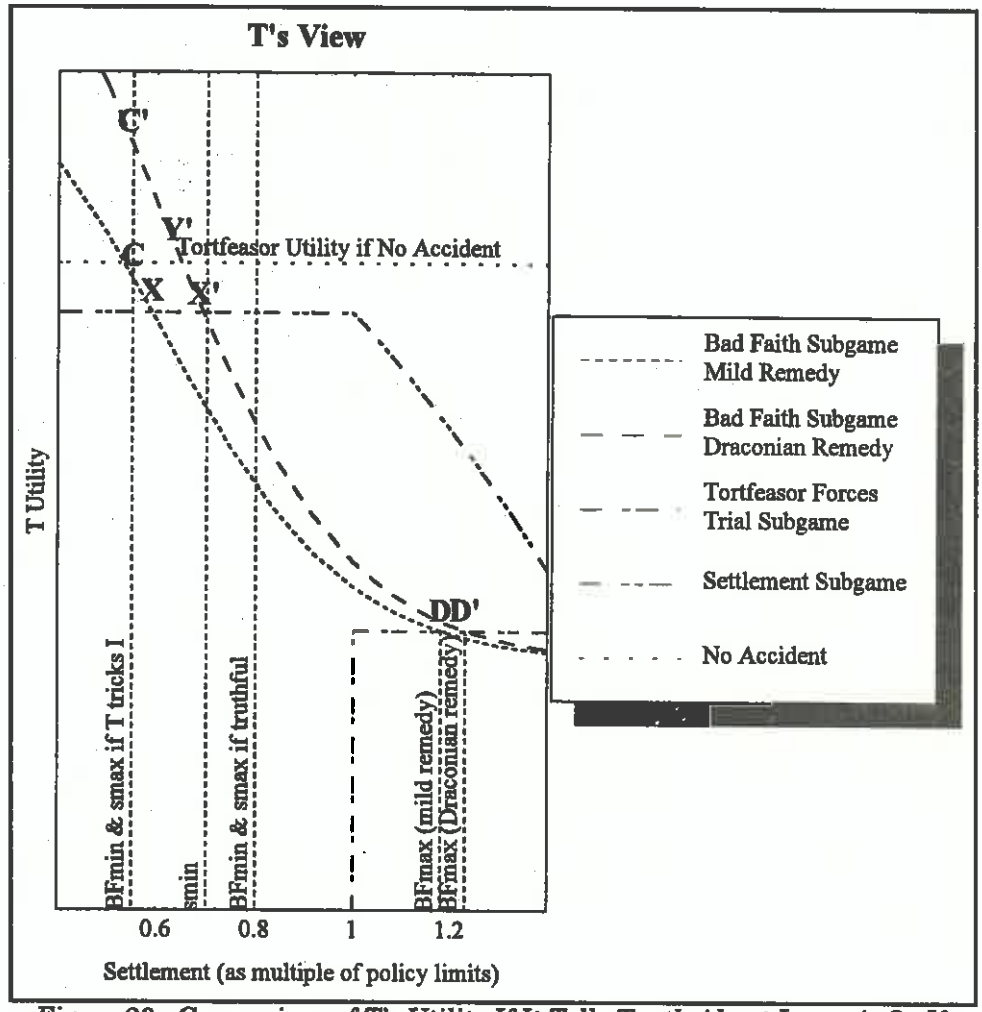


Figure 23: Comparison of T's Utility If It Tells Truth About Lawsuit Or If Lies About Lawsuit Given Variation in Remedies For Breach of the Duty to Settle.

Figure 23 illustrates why overly generous remedies for breach of the duty to settle will stimulate T to lie to I about the facts of the lawsuit against it and may even induce T to injure V deliberately. If T does not injure V, its utility is zero. If T injures V but then is truthful to I about its actions, a Settlement Equilibrium Proposal between s_{min} and "s_{max} if truthful" will result. T will receive the corresponding disutility of having to pay the deductible. If T injures V and is then able to lie to I without getting caught, T will be able to decrease the maximum settlement I will accept from s_{max} to "s_{max} if T tricks I."

The actual results of this form of trickery depend on the generosity of the remedy for breach of the duty to settle. If the remedy is relatively mild, a Bad Faith Equilibrium Proposal will result yielding combinations of settlement proposals (rejected by *I*) and *T*'s utility somewhere along locus CXD. Because most of this locus lies below *T*'s position in the Settlement subgame, *T* will find it sensible to trick *I* only if it feels it can confine settlement proposals to points along CX. Along CX, *T*'s utility is higher under the Bad Faith Subgame than it is for the Settlement Subgame. In no event, however, would *T* rationally feel that causing an accident makes sense. All points along locus CXD lie below *T*'s expected utility in the event no accident occurs.

If the remedy for breach of the duty to settle is draconian, however, attempting to trick *I* into undervaluing the case is more tempting to *T*. Success in trickery will result in combinations of settlement proposals (rejected by *I*) and *T*'s utility lying along locus C'Y'X'D'. Now, *T* will find it sensible to trick *I* so long as it can confine settlement proposals to the relatively larger range between C' and X'. At these points, *T*'s utility is higher under the Bad Faith Subgame than it is for the Settlement Subgame. Perhaps more importantly, however, *T* may now have an incentive to manufacture an accident. If *T* believes it will be able to confine settlement proposals to the range between C' and Y', it should now expect to do better in the event of an accident than it would if no accident occurred.[68]

A close study of Figure 23 suggests that deterrence of *T* from committing actions injurious to *V* will be weakest for occurrence for which coverage is truly ambiguous. Disturbingly, torts that straddle the border between intentionality and recklessness are examples of such occurrences.[69] If the odds of coverage are remote, *T* has little incentive to sabotage settlement because even if *T* succeeds, the expected value of recovery in the action against *I* for breach of the duty to settle is low; *T* is unlikely to succeed. Conversely, if coverage is almost certain, although *T* may still have an incentive to sabotage settlement—because the expected value of the recovery in the action against *I* for breach of the duty to settle is high—*T* will not expect to succeed. The high probability of coverage will have kept s_{max} relatively high and therefore have facilitated the existence of a Settlement Equilibrium Proposal. If coverage is truly ambiguous, however (though high enough to induce *I* to defend *T*), and

68. These facts argue strongly for vigorous punishment of insureds who deliberately lie to their insurers to induce them to underestimate the value of the case against them. Existing liability insurance policies, with their ambiguity as to the nature of the duty to cooperate, are simply inadequate for the task. Indeed, given the financial irresponsibility of many insureds, it is not clear any damages remedy alone can adequately protect the insurer. Thus, this may be an area in which responsible insureds and insurers would prefer any contractual remedy to be supplemented with a criminal penalty.

69. Most liability insurance policies contain intentional act exclusions or define "occurrences" so as to exclude intentional acts. Courts often interpret these exclusions narrowly, however. *See generally* JERRY, *supra* note 1, § 63B (discussing intentional acts exclusion).

no practical right of reimbursement exists against T,[70] T will have an incentive and an opportunity to sabotage settlement and reap the benefits of a cause of action for breach of the duty to settle against I. Indeed, if T can predict with some certainty that the Settlement Subgame will not be played and if the remedy for breach of the duty to settle is generous enough, T will have a positive incentive to commit certain forms of torts.[71]

E. *How Permitting Assignment of the Cause of Action for Bad Faith Modifies the Basic Analysis*

Thus far, this Article has deferred addressing any effect of the assignability of the cause of action for breach of the duty to settle on whether a given settlement proposal constitutes a Settlement Equilibrium Proposal. In game theory terms, this Article has employed a strictly noncooperative model. This Article has done so because the law on this point is not critical to the general conclusions reached in this Article. The relative unimportance of assignability stems from the basic structure of the main game. Whether the cause of action T may acquire against I for breach of the duty to settle is assignable to V may well affect T's and V's view of the Bad Faith Subgame, but it has no effect on their assessments of either the Trial Subgame, the Tortfeasor-Forced Trial Subgame, or the Settlement Subgame. Because T and V are comparing these latter possibilities when determining whether or not a given settlement proposal constitutes a Settlement Equilibrium Proposal, assignability has no effect on the size of Settlement Equilibrium Proposals.

Assignability of the cause of action for breach of the duty to settle does affect the range of settlement proposals constituting Bad Faith Equilibrium Proposals. In particular, permitting T and V to bargain increases the utility they expect to derive from the Bad Faith Subgame. If T and V can come up with an allocation of the risks and benefits of the cause of action against I for breach of the duty to settle that better accommodates their respective risk preferences, they will do so. If not, they will revert to the noncooperative solution.

The heightened attractiveness of the Bad Faith Subgame, given the opportunity for T and V to bargain, has three major effects. First, it is likely to increase the size of BF_{max}, the maximum settlement proposal for which the Bad Faith Subgame will constitute an equilibrium. Second, it increases the

---

70. Such situations arise when the law denies such a right or when T is poor. Indeed, particularly nefarious and financially irresponsible Ts might contrive lawsuits with Vs whose superficial implausibility coupled with significant settlement demands on the part of Vs made settlement impossible.

71. This peril is not fanciful. *Cf.* Baton v. Transamerica Ins. Co., 584 F.2d 907 (9th Cir. 1978) (finding an effort by a victim to set up a case for breach of the duty to settle through the use of ambiguous settlement offers). *But cf.* Parich v. State Farm Mut. Auto. Ins. Co., 919 F.2d 906 (5th Cir. 1990) (finding no trickery), *cert. denied*, 111 S. Ct. 1621 (1991).

payoffs to *T* from successfully sabotaging settlement of the lawsuit. Third, it gives *V* an incentive to cooperate with *T*'s sending of false signals to *I* about the strength of the lawsuit against *T* and gives *T* greater confidence that *V* will confine any settlement proposals it places on the table to the ranges CX or C'X'. *V* cooperates because it now has a significant interest in ensuring the success of the cause of action for breach of the duty to settle.

Thus, conversion of the model from a fully noncooperative one to one in which partial cooperation between players is permitted strengthens the suggestion that imposition of a duty to settle decreases the incentive for sophisticated potential tortfeasors to be careful toward potential victims and increases the incentive to sabotage settlement negotiations after accidents occur.

IV. SOME NORMATIVE CONCLUSIONS ABOUT THE APPROPRIATE CONTOURS OF THE LAW REGARDING THE DUTY TO SETTLE

A. *The Duty to Settle as a Method of Bonding*

In a broad sense, the law surrounding the duty to settle can be understood as an effort to control what law and economics literature has come to call "agency costs."[72] Agency costs exist when a principal, here the insured tortfeasor, retains an agent, here the insurer, to conduct activities (such as the defense of a lawsuit) to determine the welfare of the principal and to pinpoint when the cost of contracting limits the ability of the principal to specify fully in the contract how the agent should carry out the desired task.[73] Agency costs emerge because the payoffs the agent receives based on how the task is carried out vary from the principal's payoffs. Thus, although the principal might prefer the agent to be diligent, the agent might well prefer to be lazy, particularly if, between some bounds, neither the principal nor any court is able to detect the difference between diligence and laziness. The principal therefore anticipates receiving a lower payoff than it would if it had a completely faithful agent and pays the agent less than it would otherwise.[74]

In the area of liability insurance, agency costs emerge when the insured executes a contract that (1) gives the insurer the right to reject settlement offers for less than a certain sum (generally the policy limits), (2) does not require the insurer to indemnify fully the insured for all losses the insured

---

72. *See* Eugene F. Fama, *Agency Problems and the Theory of the* Fir m, 88 J. POL. ECON. 288 (1980).

73. *See* RASMUSEN, *supra* note 9, at 145. Included within the cost of contracting are the costs of monitoring the agent's compliance with any conditions identified in the contract.

74. How this loss is allocated between the principal and agent is difficult to determine a priori. In a competitive insurance market, however, one would expect the agent (i.e., the insurer) to bear the loss. *See* RASMUSEN, *supra* note 9, at 147 (discussing utility loss suffered by one's agent given "second-best" contract that results from asymmetric information and attendant "moral hazard").

may suffer as a result of the insurer's defense of the lawsuit, and (3) then surrenders sovereignty over conduct of the defense to the insurer. The insured and insurer cannot contract in advance as to how the insurer should react to every possible settlement offer: lawsuits are too varying a phenomenon to permit tight specifications. Under these circumstances, agency costs are inevitable. A selfish insurer should be expected to evaluate settlements with reference to its own well-being, and not to maximize the well-being of its principal, the insured.

One vehicle for controlling agency costs is known as bonding. Bonding occurs when the agent agrees to submit to punishment if outcomes occur that are undesirable from the perspective of its principal. Submission to this punishment, although burdening the agent with at least some of the risk of adverse consequences from matters that may well be partly outside its control, is likely to induce the agent to behave more in conformity with the principal's wishes. Although the agent may pass the cost of bearing this risk onto the principal, the principal may prefer this expense to the problems associated with reliance on an agent whose payoffs diverge from those of the principal. This is particularly true when the agent is better able to bear risk than the principal. Bonding therefore has the potential to reduce the residual loss associated with the agency relationship.[75]

The duty to settle can be understood as bonding behavior on the part of the insurer. The insurer submits itself to punishment in the event that a particular aspect of conduct within the scope of its agency (rejection of a settlement offer) leads to an outcome undesirable from the perspective of its principal. Although this submission to punishment better aligns the incentives of the insurer with those of its principal, and makes the agency relationship more palatable to the insured, the insured pays for at least part of its enhanced welfare. The insurer, who has now accepted additional risks associated with trial, passes on the cost of bearing those risks to the insured. Thus, most of the law regarding the duty to settle can be understood as an effort to optimize the overall product sold by the insurer: an effort to reduce residual loss by trading bonding costs for agency costs.

This perspective on the duty to settle facilitates a normative analysis of judicial attempts to sculpt doctrine in this field. First, it immediately challenges the prevailing notion that the law should imply a duty to settle as part of the relationship between liability insurer and insured. If insureds indeed regard the tradeoff between heightened bonding costs and lower residual losses as desirable, why would not a competitive insurance market generate contracts which themselves explicitly provide for a duty to settle and specify the punishment for breach of that duty? If the insurance market were perfect, judicial imposition of a duty to settle either as a "default rule" or some "immutable rule" the parties could not alter might be seen as a misguided ef-

75. For a clear and colorful discussion of agency costs, see generally Jonathan R. Macey, *Agency Theory and the Criminal Liability of Organizations*, 71 B.U. L. REV. 315 (1991).

fort to compel inefficient trades of bonding costs for residual losses.[76] Such an effort would discourage the purchase of liability insurance altogether.

There are two answers to this challenge. The first implicates a body of modern law and economics scholarship relating to choices among varying default rules,[77] by which is meant the rule of decision absent a contrary agreement by the parties. The second answer involves an effort to protect the victims of financially irresponsible insureds.

B. *Does the Choice of a Default Rule Trading Bonding Costs for Residual Losses Matter?*

In a world where contracting were costless, the tradeoff between agency costs and bonding costs imposed by a particular default rule relating to the duty to settle would be irrelevant. A prospective insured who perceived that it was particularly vulnerable to the risk of an excess judgment would bargain with insurers for greater protection than the default rule provided. Thus, insureds particularly terrified by financial ruin or those who knew they had purchased insurance with limits of liability inadequate to the expected range of future judgments might bargain for stronger protection than the default rule. Insurers would then conduct settlement negotiations with the interests of the insured in mind and settle cases in accordance with the methodology set forth earlier in this Article for higher amounts than they would absent a duty to settle. Prospective insureds with low susceptibility to the risk of an excess judgment might bargain for less protection. Large corporations, insureds purchasing policies from insurers conscious of their reputation in the area,[78] or insureds purchasing high-limits insurance might fall into this category. Insurers would then act selfishly in evaluating settlement offers, a process that would result in lower overall settlement values and less frequent dispute resolution through settlements.

---

76. For the leading discussion of the distinction between "default rules" and "immutable rules," see Ian Ayres & Robert Gertner, *Filling Gaps in Incomplete Contracts: An Economic Theory of Default Rules*, 99 YALE L.J. 87, 87-95 (1989). Loosely speaking, default rules are the rules the law implies when the parties are silent. Parties to a transaction can change "default rules." Parties cannot, however, change immutable rules such as the duty to act in good faith in transactions covered by the Uniform Commercial Code. U.C.C. § 1-203 (1990).

77. The leading articles are listed in Ian Ayres & Robert Gertner, *Strategic Contractual Inefficiency and the Optimal Choice of Legal Rules*, 101 YALE L.J. 729, 729 n.1 (1992).

78. Concern about reputation may deter an agent from "cheating" on its principal. Although such cheating might be undetectable in a given case, repeated cheating might well create a bad reputation that would cause the insurer to lose future business. *See* RICHARD A. POSNER, ECONOMIC ANALYSIS OF LAW 90-91 (3d ed. 1986). Such concerns only function, however, if a more faithful insurer is able to demonstrate that, at least over the long run, it has acted in the best interests of its insured in settling litigation. Such reputations are difficult to acquire in the noisy and often inaccessible world of insurance defense.

No matter what the default rule, however, a "separating equilibrium" would likely develop[79] in which multiple forms of contract would prevail. Frightened insureds would pay higher prices for liability insurance contracts with greater protection against self-serving settlement rejections by defending insurers. The trusting, brave, or less vulnerable would purchase cheaper insurance with lesser protections against agency costs.[80] The court's choice of a default rule would not alter the fashion in which separation occurred or the distribution of insurance contracts one would see in equilibrium.[81]

Although this story may apply in some markets, it is a fairy tale with respect to liability insurance. Most insureds cannot costlessly bargain their way out of a default rule. To the contrary, intelligent bargaining on this point requires a most unlikely educational process. First, it requires the insured to become educated as to the economics of liability insurance so it can understand the risk of agency costs and the vehicles for their reduction. Having acquired the sophistication needed to comprehend the economic theory, however, the insured must then assume a studied ignorance as to the realities of modern insurance institutions. The insured must forget that state regulatory provisions[82] and the demands of reinsurers for homogeneous insurance contracts[83] make it extraordinarily difficult to change the provisions of a liability insurance contract. In circumstances when bargaining away from the default provision is costly, the choice of a default rule matters greatly. If the obstacles to bargaining are particularly great, the parties may

---

79. There is no guarantee, however, that a classical "Nash equilibrium" would exist. *See* RASMUSEN, *supra* note 9, at 193 (noting no separating or pooling Nash Equilibrium may exist in certain examples of adverse selection, but finding closely related "Wilson Equilibrium" will exist, consisting of a separating equilibrium if one exists, and otherwise the pooling equilibrium most preferred by those who would be least hurt from the absence of an agency relationship).

80. If insurers were able, through investigation, representations and warranties, or contractual conditions, to distinguish perfectly between high-vulnerability insureds and low-vulnerability insureds, not only would the default rule be irrelevant to actual contracts selected by insureds, but no inefficiency could result from the choice of default rule. Insurers would offer highly vulnerable insureds a policy with a strong duty to settle for an additional charge and offer the less vulnerable a policy with a weak duty to settle or no duty to settle. Insurers would then conduct settlement negotiations in accord with the theory set forth previously in this Article depending on the penalty they faced for breach of the duty to settle. The insurance market would differ little from the classical market in which producers satisfy consumers with different preferences by selling them different baskets of goods. The problem arises when insurers cannot distinguish in advance between high-vulnerability insureds and low-vulnerability insureds. If insurers offer a cheap policy attractive to the low-vulnerability insureds, high-vulnerability insureds will also purchase it, and then claim when breach occurs to have been greatly injured by the breach. *See generally* Ayres & Gertner, *supra* note 77, at 741 n.42 (discussing assumption of "noncontractability" and its effect on choice of default rules).

81. *Id.* at 762.

82. *See generally* KEETON & WIDISS, *supra* note 20, § 2.8 (discussing the ways government regulatory requirements as to filing or approval of policies standardize insurance policies, but noting a large insured may be able to obtain tailored coverage).

83. *See* R.L. CARTER, REINSURANCE 417 (1979).

stay mired in the contract the court has made for them rather than start scrambling to the positions that suit them individually.

C. *What Default Rule Should Courts and Legislatures Choose?*

1. *In Support of an Indemnity Principle*

The real question, then, is not whether the choice of default rule matters. Clearly it does. The real issue is what tradeoff between bonding costs and residual losses the courts or legislatures should select through their sculpting of the duty to settle. Fortunately, although there is a lively battle among the sophisticates in this area as to precisely the circumstances under which certain default rules should be chosen,[84] the theories coalesce in favor of a single proposition for the duty to settle: As part of the contract between insurer and liability insured, or through the creation of tort liability, the law should require the insurer to indemnify its insured against the risks of unreasonable settlement rejections, but to do no more than indemnify the insured in that regard.

The majoritarian notion that the default rule should be the one preferred by the majority of contracting parties justifies the indemnity principle.[85] Most insureds in most markets are highly vulnerable to a wrongful breach of the duty to settle. They fail to buy liability insurance that covers the upper range of potential judgments against them, and they have little by way of attachable assets to cushion their fortunes against an excess judgment. It therefore minimizes bargaining costs to give most insureds what they want without forcing them to bargain for it.[86]

---

84. Ayres & Gertner, *supra* note 76, at 89-90 (summarizing the early debate as pitting the majoritarians—those who believe the default rule should be what most of the parties would have selected given full information and costless contracting—against those who believe the choice of default rule should depend on a variety of circumstances and, in some instances, should be precisely the rule most of the parties would *not* prefer).

85. *See, e.g.*, Frank H. Easterbrook & Daniel R. Fischel, *Corporate Control Transactions*, 91 YALE L.J. 698, 700 (1982). *But see* David Charny, *Hypothetical Bargains: The Normative Structure of Contract Interpretation* , 89 MICH. L. REV. 1815, 1815 (1991) (criticizing this view as "fundamentally flawed").

86. This assumption might not be true in all liability insurance markets. The market for director and officer liability insurance or environmental liability insurance is likely populated by more sophisticated insureds. Fewer of the insureds might be particularly vulnerable to an excess judgment, and more of the insureds would be able to bargain cheaply out of whatever default was chosen. Thus, providing no duty to settle as the default rule might be appropriate. The question, however, is whether it would be worth the court's time to sort out which markets had this characteristic and which did not. Duncan Kennedy, *Form and Substance in Private Law Adjudication*, 89 HARV. L. REV. 1685, 1689-90 (1976) (discussing optimal generality of legal rules). Given the ability of sophisticated parties to bargain out of a default, a uniform indemnity principle as the default rule covering the spectrum of liability insurance markets has considerable appeal.

The indemnity principle may be justified, however, even if vulnerable insureds are in the minority. Vulnerable insureds, those whose assets are exposed to the risk of an excess judgment, are likely to be the least sophisticated insureds. These insureds will incur far greater costs in moving away from a default that denied a duty to settle than the less vulnerable, more sophisticated insureds would generally incur in moving away from a default rule that granted a strong duty to settle. Sticking the vulnerable in a default that fails to meet their interests may trap the vulnerable in a regime with a significant risk of unreduced agency costs. Sticking the less vulnerable in a default that fails to meet their interests means only that they will use their sophistication to climb out.[87]

Finally, a default rule that protects the unsophisticated may be justified on the theory it increases the opportunities for potential insureds to enter into liability insurance contracts best suiting their needs. If the default rule provides for no bonding, but vulnerable insureds tend to believe the contrary, the insurer has little incentive to correct such insureds' misimpressions. Those insureds may purchase liability contracts—perhaps with lower limits than might be purchased if the truth were known—and may suffer a loss when the insurer then lawfully refuses to take their interests into account when evaluating settlement offers. Insureds with less vulnerability obtain the type of contract they want, though they may profit less from the transaction than they expected if misinformed about the rule of law. If the default rule provides for bonding, however, insurers have an incentive to advise all potential insureds about the potential savings available from waiving the bonding obligation. High-vulnerability insureds stand a chance to become properly informed about the duty to settle and may well decide to pay the extra premium for the bond. Some low-vulnerability insureds may decide to waive the bond. In either event, explicit negotiation over the insurer's obligation to accept settlement offers that a purely selfish insured would reject can improve efficiency. The heightened efficiency results from allowing the parties to allocate risk optimally by choosing a contract with a combination of limits of liability and a level of bonding that leads to more efficient reliance, breach, and renegotiation. Setting the default rule in favor of the ignorant insured heightens the likelihood of such negotiations.[88]

One by-product of the indemnity principle is a criticism of the Wisconsin rule excusing the insurer from its duty to settle in cases in which coverage existed but the correctness of a contrary view was fairly debatable.[89] Most insureds are equally vulnerable to the risk of an excess judgment regardless of whether coverage is clear or ambiguous. If a duty to settle

---

87. For a full exposition of this line of argument, see Ayres & Gertner, *supra* note 76, at 108-18.

88. For a more general exposition of this line of argument, see Ayres & Gertner, *supra* note 77, at 759-62.

89. *See supra* text accompanying notes 58-59.

makes sense as a default rule when coverage clearly exists, it makes sense when coverage exists, though the insurer reasonably thought it might not. Moreover, bargaining out of the Wisconsin rule is likely to be extraordinarily difficult and costly for the insured vulnerable to its application. Even most law students have great difficulty understanding the rule and its application. When the majority position regarding coverage ambiguities is the default, sophisticated insureds who are willing to purchase a moderately cheaper liability insurance policy in exchange for a weaker bond by the insurer can bargain into the Wisconsin rule, though it is doubtful few of the less vulnerable insureds would prefer that mutation of the duty to settle to one that simply did away with the duty altogether.

Thus far, this Article has addressed why an indemnity principle is preferable as a default rule versus a no-indemnity principle. This Article now addresses why the law should not, as a default rule, require the insurer to do substantially more than indemnify the insured against the risk of unreasonable settlement rejections. The argument here rests on the proposition that requiring the insurer to do more than indemnify the insured is essentially like bundling a lottery ticket with a liability insurance policy. If the insurer breaches the duty to settle, the insured collects a large sum, though it is out the cost of the ticket—the extra amount the insured had to pay the insurer to compensate it for the risk of having to pay off on the gamble. If the insurer does not breach its duty, the insured is out the cost of the ticket.

Bundling the lottery ticket of extra-indemnity damages to a liability insurance policy makes little economic sense and goes against the traditions of insurance law.[90] It makes little economic sense because most insureds are risk averse. Those who wish to gamble will probably find more fulfilling outlets than the purchase of liability insurance policies. Although it is efficient to protect the insured's expectation that selfish behavior on the part of its liability insurer will not injure the insured's financial position, it is generally not efficient to do more by demanding extra cash from the breaching insurer.[91] Moreover, as discussed in Part III, granting extra-indemnity damages creates a serious risk of two forms of moral hazard. The insured may have an incentive to misinform the insurer as to the strength of the case against it in order to set up a breach of the duty to settle. The victim may have an incentive to cooperate in this endeavor. If the rewards are great enough, the insured may stage a tort in order to take advantage of the oppor-

---

90. Insurance traditionally operates on the "indemnity principle," the notion the insured should be left in the same position it was prior to the adverse event, not a superior position. The indemnity principle stands at the root of important insurance law doctrines such as equitable subrogation and the insurable interest doctrine. *See* GEORGE E. REJDA, PRINCIPLES OF INSURANCE 61-67 (3d ed. 1989).

91. For a proof that supracompensatory damages are in general inefficient, see Alan Schwartz, *The Myth that Promisees Prefer Supracompensatory Remedies: An Analysis of Contracting for Damage Measures*, 100 YALE L.J. 369 (1990).

tunity to sabotage settlement negotiations and collect on the extra-indemnity lottery.[92]

2. *But Which Indemnity Principle?*

Two hard questions remain unanswered by the study of default rules. The first relates to the method of indemnification and the second to whether the default rule should, in fact, be an immutable rule out of which the insured and insurer cannot bargain.

Recall that the insured can be protected from the risks created by breach of the duty to settle in two ways. The majority approach is to give the tortfeasor the amount of the excess judgment upon a finding of breach. The Michigan minority approach is to let the victim collect as extra-contractual damages only the net worth of the insured and to protect the insured from liability for damages in excess of policy limits.

If society were to set default rules for liability insurance contracts with only the interests of the insured and insurer in mind, the Michigan rule would be clearly preferable to the majority approach. The Michigan rule manages to reduce agency costs and bonding costs simultaneously. The rule reduces agency costs by effectively limiting the insured's exposure from an excess judgment caused by breach of the duty to settle to the amount of its deductible under the liability insurance policy. The rule reduces bonding costs by requiring the insurer only to issue a bond in the amount of the net worth of its insured, rather than the amount of any excess judgment. Under the Michigan approach, the insurer effectively issues this bond to the victim.

The Michigan rule arguably ignores, however, the problem of external costs generated by the financial irresponsibility of the insured. It is generally accepted today that tort law fails to adequately deter financially irresponsible tortfeasors because their financial irresponsibility permits them to discount some of the costs they create by risky behaviors.[93] Judge Learned Hand's

92. In arguing for an indemnity approach, this Article does not contend it is inappropriate for courts or legislatures to fashion some modest additional reward to the victimized insured such as attorneys' fees or other modest compensations for the risks of litigation. In a large sense, these additional remedies are consistent with the indemnity approach by providing the insured with "full insurance" against the risks created by the agency relationship with the liability insurer. Large awards for emotional distress are troubling, however, in that it is somewhat difficult to see how the insured reasonably suffers emotional distress from having a judgment entered against it if the insurer is legally obligated to indemnify the insured against loss for unreasonable settlement refusals. The insured may have some doubts, however, that the litigation process will work flawlessly. Thus, modest emotional distress damages, if proven, are not antithetical to the indemnity principle.

93. *See* STEVEN SHAVELL, ECONOMIC ANALYSIS OF ACCIDENT LAW 167-70 (1987); Jeffrey Kehne, *Encouraging Safety Through Insurance Based Incentives: Financial Responsibility for Hazardous Waste*, 96 YALE L.J. 403 (1986).

$B<PL$ formula for negligence[94] fails its touted efficiency justification[95] when the tortfeasor cannot pay the L. Financially irresponsible tortfeasors therefore engage in an inefficiently large amount of risky behavior and impose unjustified costs on their potential victims. To the extent an insurer can monitor and police the behavior of its insured, even financially irresponsible tortfeasors are induced to internalize the costs of the risks they create and to adjust their risky behaviors accordingly.[96] The more complete the insurance, the greater the extent of this cost internalization. High-limits insurance, therefore, internalizes the costs of risk better than low-limits insurance. This argument implies that anything society can do to induce purchase of high-limits policies enhances economic efficiency. The majority approach to the indemnity principle makes sense, this argument continues, because it alters the relative prices of low-limits and high-limits policies and thereby induces purchase of efficiency-enhancing and victim-protecting high-limits insurance.

In sum, the Michigan indemnification principle protects the insured from the risks created by the agency relationship between it and the insurer, but perpetuates the external costs generated by the financial irresponsibility of many insureds. The majority rule, by contrast, protects the insured from risks of the agency relationship, but reduces the external costs created by the financial irresponsibility of many insureds. The insured pays, however, for this reduction in external costs through higher insurance premiums.

Society's preference regarding the two rules may well depend on an empirical question. If the majority approach, to the extent it is immutable or difficult to contract around, induces purchase of higher-limits liability insurance rather than purchase of no liability insurance, the rule makes sense as a vehicle for reducing both agency costs and externalities. On the other hand, if the majority rule instead reduces purchase of any liability insurance, the Michigan approach would be preferable.[97] In the absence of empirical evidence or even a strong intuition as to the matter, it is difficult to label either approach as inefficient or unfair.

D. *Should the Law Permit Bargaining Around an Indemnity Solution to Breach of the Duty to Settle?*

Having established an indemnity principle as a default rule for breach of the duty to settle in liability insurance contracts, this Article considers

---

94. *See* United States v. Carroll Towing, 159 F.2d 169, 173 (2d Cir. 1947) (defining negligence as a situation in which B, the cost of having taken precautions that would have avoided the accident, was less than the product of P, the ex ante probability of an accident absent such precautions, and L, the damage caused to the victim in the event of an accident).

95. *See* POSNER, *supra* note 78, at 147-51.

96. *See* SHAVELL, *supra* note 93, at 240-43.

97. Of course, if society were truly interested in reducing the externalities caused by financially irresponsible tortfeasors, the more direct approach would be to broaden the spectrum of activities for which liability insurance was compulsory.

finally whether society should constrain the ability of the parties to bargain around that default rule. Should an insured who regards itself as less or more vulnerable than the typical insured to the hazards of the agency relationship between itself and its insurer be constrained in its ability to require the insurer to put up a larger or smaller bond to reduce that residual loss? Two facts suggest some modest restraints on freedom of contract in this area.

1. *Compulsory Pooling*

The first basis for restricting freedom in this area emerges from the advantages of what law and economics literature refers to as "compulsory pooling" arrangements. If insureds are permitted to purchase different forms of protection from agency costs depending on their vulnerability to an excess judgment, a pooling arrangement in which one default rule covers all insureds may not be possible. There will likely be a contract providing slightly less protection at a slightly lower price that those less vulnerable to an excess judgment would prefer to the pooling arrangement but that those more vulnerable to an excess judgment would not prefer.[98] The divergent preferences of different types of insureds will therefore create what is known as a "separating equilibrium" in which different types of insureds purchase different protections from breach of the duty to settle but pay different prices for the policies. The problem with this separating equilibrium is that because the insurer may have difficulty distinguishing the more vulnerable from the less vulnerable, it cannot make the policy preferred by the less vulnerable particularly attractive to the more vulnerable. Otherwise, the insurer will have priced a policy based on the assumption that only the less vulnerable would buy it, only to find the process of "adverse selection" had induced the more vulnerable to buy it also. An insurer that engaged in such conduct would go broke.

Thus, as this line of economic theory proceeds, the insurer will have to offer the less vulnerable less protection than they would desire from the risk of an excess judgment.[99] These insureds might receive only fractional indemnity for the losses they suffer when the insurer breaches its duty to settle. The result is a loss in social welfare in that agency costs for moderate-vulnerability insureds will be higher than could ideally be achieved.

An immutable default rule eliminates the problem of an inefficient separating equilibrium. The court or legislature can establish a duty to settle out of which the parties cannot bargain. Insurers will then set prices to cover the average losses generated by vulnerable and less vulnerable insureds. Particularly when the undetectable difference between more vulnerable and

98. *See* KREPS, *supra* note 31, at 632-45 (discussing arguments against the possibility of pooling equilibrium given asymmetric information prior to contract formation); RASMUSEN, *supra* note 9, at 191 (same).

99. *See* Ayres & Gertner, *supra* note 77, at 739-42.

less vulnerable insureds is great, both will prefer this compulsory pooling equilibrium to the separating equilibrium generated when bargaining was permissible.[100] Thus, corporate insureds might prefer a law prohibiting them from bargaining for lesser protection at a lower price if it meant the contract would provide them virtually no protection at all.

2. *Paternalism*

The second basis for restricting freedom in this area rests less on the complexities of modern economic theory and more on old-fashioned paternalism. If the vulnerability and lack of sophistication of most insureds provided the basis for establishing the indemnity principle as the default rule, it would make little sense to permit insurers effectively to subvert that choice of default through the cheap device of fine print in the insurance policy exempting the insurer from any duty to settle. Thus, reductions in the protections of the duty to settle should not be permitted absent clear and convincing evidence that the insured either was sophisticated at the outset of negotiations or had become sophisticated as to the choices involved and therefore voluntarily assumed the greater risks of residual losses in exchange for lower bonding costs.[101] If this standard is not met, courts should use the "blue pencil" approach and restore such a deviant contract to the default position.[102]

---

100. *See* RASMUSEN, *supra* note 9, at 193, fig. 8.7.

101. This perspective sheds considerable light on the controversy as to the extent to which primary insurers owe a duty to settle to excess insurers. *See generally* Francis M. Gregory, Jr. & Nicholas T. Christakos, *Primary, Excess and Reinsurance Problems in Large Loss Cases* , 59 DEF. COUNS. J. 540 (1992) (summarizing theories of liability). An excess policy is, in essence, one with a deductible equal to the policy limits of the primary policy and policy limits greater than the policy limits of the primary policy. *Id.* at 541. When the insured purchases an excess policy large enough to provide relatively full insurance for even the largest possible judgments against it, its vulnerability to an excess judgment declines. The excess policy becomes, in effect, a substitute or supplemental bond to the insured against selfish conduct by the primary insurer. Because of a long-term relationship with the primary insured or because of substantial financial reserves, the excess insurer may be relatively invulnerable, however, to selfish behavior by the primary insured. It might therefore advise the insured to renegotiate its primary insurance policy and excuse the insurer from its duty to settle except to the extent the excess judgment exceeds the limit of the excess policy. Provided the insured, well-advised by the excess insurer as to the benefits of this arrangement, knowingly waives its rights in this manner, the insurer should owe no duty to settle to either the excess insurer or the insured. The excess insurer has now substituted its bond for that of the primary insurer in protecting the insured. In the absence of such renegotiation, however, the law should equitably subrogate the excess insurer to the rights of the insured arising out of any breach of the duty to settle. *See, e.g.,* North River Ins. Co. v. St. Paul Fire & Marine Ins. Co., 600 F.2d 721 (8th Cir. 1979) (applying South Dakota law); Great American West v. Safeco Ins. Co., 277 Cal. Rptr. 349 (Ct. App. 1991). The purchase of additional protection by the insured should not ordinarily excuse the primary insurer from its bond.

102. *See* Ayres & Gertner, *supra* note 76, at 125-27 (discussing Fullerton Lumber Co. v. Torborg, 70 N.W.2d 585 (Wis. 1955), and the "blue pencil" approach to unconscionable contracts).

The case for barring the insurer from bargaining with the insured for *heightened* protection, however, is a weaker one. So long as the insurer operates within the contours of the indemnity principle and does not begin establishing moral-hazard-creating penalties,[103] the insurer should be free to bargain with the insured over, for example, allocation of attorneys' fees or stipulated damages or stipulated floors on damages for the emotional distress resulting from breach of the duty to settle.[104]

The difficulty with a "single-sided immutable rule"[105] such as this is that insurers may be able to bargain insureds down to the minimal level of protection consistent with the indemnity principle. In the absence of any single definition of the indemnity principle, those insurers will plausibly claim they were actually according the insured "heightened protection." Courts or legislators may therefore wish to establish guidelines constituting a minimum level of indemnity for breach of the duty to settle below which insurers will be obligated to meet the assumption of risk standard set forth above.

V. CONCLUSION

As this Article has demonstrated, the law relating to the duty to settle plays a critical role in the disposition of lawsuits by a victim against an insured tortfeasor. The law relating to the duty to settle determines the frequency with which such cases will be tried rather than settled and, to a substantial extent, the compensation received by victims of insured tortfeasors. Finally, it determines the premiums paid by potential tortfeasors for liability insurance and therefore determines the policy limits of insurance policies purchased in the marketplace.

Unfortunately, although the law relating to the duty to settle has evolved over the past half century, few critical examinations of these effects have been made. Although this Article has, with several exceptions, found the evolution of this law to be a largely sensible adaptation to the balance between bonding costs and residual losses generated by the agency relationship between the insured and its insurer, there is still considerable room for reform. First, there appears to be little justification for the awards of significant extra-indemnity damages available in some jurisdictions for breach of the duty to settle. Such awards create an incentive for the insured to breach his or her duty of cooperation to the insurer and, at sufficiently high levels, create a positive incentive for insureds to inflict contrived or real injuries on victims. Second, establishing a default rule allowing coverage ambiguities to excuse the insurer from its duty to settle appears unwise. Such efforts un-

---

103. *See supra* part III.D (discussing how large damage awards for breach of the duty to settle may induce insureds to lie to their insurer and commit torts).

104. Traditional law permitting liquidated damage clauses but barring "penalties" should be adequate to this task. *See* RESTATEMENT (SECOND) OF CONTRACTS § 356 (1981).

105. The term is from Ian Ayres, *Analyzing Stock Lock-ups: Do Target Treasury Sales Foreclose or Facilitate Takeover Auctions?* 90 C OLUM. L. REV. 682, 709-10 (1990).

duly hamper settlement and unnecessarily subject vulnerable insureds to an unreasonable risk from an excess judgment.

More fundamental reforms in this area, however, must focus on restructuring the defense relationship between an insured and its insurer in a fashion that is more sensitive to the potential problems posed by agency costs. Although Michigan has taken a first step in this area by basing damage awards for breach of the duty to settle on the net worth of the insured, this effort may well have come at the expense of potential victims now exposed again to underinsured tortfeasors. The next step for the insurance market is for insurers, risk managers and consumer groups to develop governance mechanisms within the insurance policy that facilitate the adjustment of bonding requirements to the facts of a particular occurrence.[106] It is difficult to understand why the rules relating to the duty to settle must be identical for every lawsuit brought against a potential insured. Although the contractual provisions needed to attain this flexibility may be somewhat more complex than the existing blanket delegation of control to the insurer, such reform carries a promise of substantial reward to the benefit of insurers, insureds, and victims alike.

106. The argument here is that the parties need to develop what Professor Shavell has called a more "Pareto efficient complete contingent contract." *See* Shavell, *supra* note 34, at 467. A complete contingent contract is one that addresses the performance obligations of the parties under all possible future states of the world. A Pareto efficient complete contingent contract is one that does so in a fashion such that no party to the contract can be made better off without making another party worse off. *Id.* at 466-67. Current insurance contracts do not alter policy limits and deductibles based on the frequency of distribution of judgments expected in litigation. Instead, the contract relies on the creation of a duty to settle enforceable by a damages remedy to approximate the Pareto efficient complete contingent contract. While this approximation may function relatively well under many circumstances, just as the expectancy damages remedy often functions under other circumstances as a useful approximation for a Pareto efficient complete contingent contract, there may well be room to improve the approximation. It may be that creative insurers, risk managers, or consumer groups could find a market niche by developing a liability insurance contract that contained only a modest duty to settle but that contained an enforceable and relatively simple mechanism for adjusting policy limits based on the risks posed by various accidents.

Technical Appendix

I. Derivation of Expressions for Subgame outcomes

Appendix Table 1
The Settlement Subgame

Player	Expected Utility
T	$S_t[s,\rho,\bullet] = c\,u_t\left[T[s,w_t,\bullet]\right] + (1-c)\,u_t\left[T[s,w_t,\bullet] + \rho I[s,\bullet]\right]$
I	$S_i[s] = c\,u_i\left[I[s,\bullet]\right] + (1-c)\,u_i\left[I[s,\bullet] - \rho \text{Max}\left[-w_t, I[s,\bullet]\right]\right]$
V	$S_v[s,\rho,\bullet] = u_v[s]$

Variables

c is the probability that the occurrence is covered by the policy

w_t is the wealth of the tortfeasor available to satisfy judgments

s is the amount of the settlement, where $0 \le s \le \text{limits} + w_t$

Legal Parameters

$\rho = 0$ if the settling insurer is not legally entitled to reimbursement from the tortfeasor in the event that subsequent coverage litigation shows that the insurer had no duty to indemnify its insured. Otherwise, $\rho = 1$.

Functions

$T[s,w_t,\bullet]$ is the amount gained by T possessing wealth w_t as the result of a settlement of amount s. The dot argument following the s indicates that there may be other parameters such as the deductible or policy limit that shape a function but that they are not essential to this presentation. Note that this function will be negative for all values of s.

$I[s,\bullet]$ is the amount gained by I as the result of a settlement of amount s. Note that this function will be negative for all values of s.

$u_t[x], u_i[x]$, and $u_v[x]$ are the respective utility functions of T, I, and V for wealth increases in amount x. A negative value for x means that the player is losing wealth rather than obtaining it.

$S_t[s,\rho,\bullet]$, $S_i[s,\rho,\bullet]$, and $S_v[s,\rho,\bullet]$ are the respective expected utilities of T, I, and V as a result of a settlement in amount s.

Appendix Table 2
Trial Subgame

Player	Expected Utility
T	$TS_t[\bullet] = \int_{j \in J} p_t[j]\,PTCL_t[j,\bullet]dj - EU_t^{\downarrow T}$
I	$TS_i[\bullet] = \int_{j \in J} p_i[j]\,PTCL_j[j,\bullet]dj - EU_i^{\downarrow T}$
V	$TS_v[\bullet] = \int_{j \in J} p_v[j]\,PTCL_v[j,\bullet]dj - EU_v^{\downarrow T}$

Variables

$j \in \{J : 0 \le J < \infty\}$ is the amount of the judgment.

$EU_k^{\downarrow T}$ is the expected loss of utility to player k (where $k \in \{T, I, V\}$) resulting from net additional attorneys fees relative to disposition of the case by settlement.

Functions

$p_k[j]$ is the probability density function perceived by player k of a court issuing a judgment against the defendant in amount j such that $\int_{j \in J} p[j]dj = 1$

$TS_k[\bullet]$ is the expected utility to player k from playing the Trial Subgame.

Auxilliary Functions

$$PTCL_t[j,\bullet] = c\,u_t[T[j,w_t,\bullet]] + (1-c)\,u_t[Max[-w_t,-j]]$$

$$PTCL_i[j,\bullet] = c\,u_i[I[j,\bullet]] + (1-c)\,u_i[0]$$

$$PTCL_v[j,\bullet] = c\,u_v[Min[w_t - T[j,w_t,\bullet]] - I[j,\bullet]] + (1-c)\,u_v[Min[w_t, j]]$$

Appendix Table 3 Tortfeasor Forces Trial Subgame	
Player	Expected Utility
T	$\text{TFTS}_t[s] = TS_t[\bullet]$, for s ≥ limits, otherwise $\text{TFTS}_t[s] = -\infty$
I	$\text{TFTS}_i[s] = TS_i[\bullet]$
V	$\text{TFTS}_v[s] = TS_v[\bullet]$

Appendix Table 4 (Page 1 of 3) Non-Cooperative Bad Faith Trial Subgame
$NCBFT_t[s,c,e,\mu] = bfp_t[s]BFU_t[c,e,\mu] + (1 - bfp_t[s])\int_{j\in J} p_t[j]PTCL_t[j,\bullet]dj -$ $\left((1-\varepsilon_t)EU_t^{\downarrow T} + \varepsilon_t EU_t^{\downarrow BFT}\right)$
$NCBFTi[s,c,e,\mu] = bfp_i[s]BFU_i[c,e,\mu] + (1 - bfp_i[s])\int_{j\in J} p_i[j]PTCL_i[j,\bullet]dj -$ $\left((1-\varepsilon_i)EU_i^{\downarrow T} + \varepsilon_i EU_i^{\downarrow BFT}\right)$
$NCBFT_v[s,c,e,\mu] = bfp_v[s]BFU_v[c,e,\mu] + (1 - bfp_v[s])\int_{j\in J} p_v[j]PTCL_v[j,\bullet]dj -$ $\left((1-\varepsilon_v)EU_v^{\downarrow T} + \varepsilon_v EU_v^{\downarrow BFT}\right)$

Appendix Table 4 (Page 2 of 3)
Non-Cooperative Bad Faith Trial Subgame

Definitions

EJ is the set of judgments in excess of policy limits

ε_k is the likelihood, as perceived by player k, that an excess judgment will occur.

$EU_k^{\downarrow BFT}$ is the expected loss of utility to player k resulting from net additional attorneys fees resulting from an excess judgment and subsequent bad faith litigation relative to disposition of the case by settlement.

Functions

$NCBFT_k[s,c,e,\mu]$ is the expected utility derived by player k from playing the Non-Cooperative Bad Faith Trial Game, where e is the probability that, although the insurer had a duty to indemnify the insured, a contrary position would have been "fairly debatable," and where μ is a parameter set equal to one if the jurisdiction in question follows the Wisconsin Rule regarding excuse for the duty to settle and otherwise set equal to zero.

Auxiliary Functions

$bfp_k[s]$ is the probability, as perceived by player k, that a court would find the insurer's rejection of a settlement offer of amount s to be unreasonable.

$ECD[j,\bullet]$ is the amount of extracontractual damages "gained" by I if it is held to have breached the duty to settle. This function will generally take on a negative value.

BFU_k is the expected utility derived by player k when the court finds that an insurer's rejection of a settlement offer of amount s is unreasonable, where:

$$BFU_i[c,e,\mu] = \int_{j\in EJ} p[j]PTCL_i[j,\bullet]dj + \int_{j\in EJ} p_i[j]\left(c\begin{pmatrix}\mu e\, u_i[T[j,w_i]]+\\ (1-\mu e)u_i[T[j,w_i]-ECD[j,\bullet]]\end{pmatrix}+ (1-c)u_i[\mathrm{Max}[-w_i,-j]]\right)dj$$

Appendix Table 4 (Page 3 of 3)
Non-Cooperative Bad Faith Trial Subgame

$$BFU_i[c,e,\mu] = \int_{j\in EJ} p[j]PTCL_i[\bullet]dj + \int_{j\in EJ} p_i[j]\left(\begin{array}{l} c\left(\begin{array}{l}\mu e\, u_i[I[j,\bullet]] + \\ (1-\mu e)u_i[I[j,\bullet] + ECD[j,\bullet]]\end{array}\right) + \\ (1-c)u_i[0]\end{array}\right)dj$$

$$BFU_v[c,e,\mu] = \int_{j\in EJ} p[j]PTCL_v[\bullet]dj + \int_{j\in EJ} p_v[j]\left(\begin{array}{l} c\left(\begin{array}{l}\mu e\, u_i[T[j,w_i]] + \\ (1-\mu e)u_i[T[j,w_i] - ECD[j,\bullet]]\end{array}\right) + \\ (1-c)u_i[\mathrm{Max}[-w_i,-j]]\end{array}\right)dj$$

II. Specification of equilibrium proposals

This background now permits a more succinct and formal definition of Settlement Equilbrium Proposals (SEP) and Bad Faith Equilibrium Proposals (BFEP).

$$SEP = \left\{\begin{array}{l} s: \left(S_i[s,\rho,\bullet] \geq \mathrm{TFTS}_i[s]\right) \wedge \left(S_i[s,\rho,\bullet] \geq \mathrm{NCBFT}_i[s,c,e,\mu]\right) \wedge \\ \left(S_v[s,\rho,\bullet] \geq \mathrm{TS}_i[\bullet]\right)\end{array}\right\}$$

$$BFEP = \left\{\begin{array}{l} s: \quad \left(\mathrm{NCBFT}_i[s,c,e,\mu] \geq \mathrm{TFTS}_i[s]\right) \wedge \\ \left(\mathrm{NCBFT}_i[s,c,e,\mu] \geq S_i[s,\rho,\bullet]\right) \wedge \\ \left(\mathrm{NCBFT}_v[s,c,e,\mu] \geq \mathrm{TS}_v[\bullet]\right)\end{array}\right\}$$