# EXPECTED VALUE ARBITRATION

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I.	Introduction

This Article proposes a new form of dispute resolution:  Expected Value Arbitration

("EVA").  In some ways, EVA resembles traditional forms of arbitration: disputants choose to

enter into EVA; they present their legal arguments and evidence to a neutral party; and the

neutral party imposes a resolution that binds them.  What makes EVA unique is its standard for

decision-making.  The neutral party is to award her estimate of the expected value of the

outcome at trial—that is, the average of the possible outcomes with each weighted by its

likelihood of occurring.[1]  The expected value of trial is already often used as a point of departure

for settlement negotiations.[2]  By relying on expected value, EVA in essence offers the imposition

by a neutral party of an objectively reasonable settlement.

EVA lies  at the intersection of two trends in the law.  One trend is in the practice of law,

and it is toward informal dispute resolution.  Recent decades have seen a much-remarked

explosion of alternatives to trial.[3]  They include mediation,[4] non-binding arbitration,[5] binding

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[1] See John J. Donohue III, Opting for the British Rule, or if Posner and Shavell Can't Remember the Coase
Theorem, Who Will?, 104 Harv. L. Rev. 1093, 1096 (1991); Note, Settling for Less:  Applying Law and Economics
to Poor People, 107 Harv. L. Rev. 442, 444 (1993).

[2] See, e.g., Paul J. Mode, Jr., and Deanne C. Siemer, The Litigation Partner and the Settlement Partner, 12 No. 4
Litigation 33 (1986).  Various scholars have long relied on models of litigation that recognizes this use of expected
value.  See, e.g., Richard Posner, Economic Analysis of Law § 21.5, 554-56 (4th ed. 1992); George L. Priest &
Benjamin Klein, The Selection of Disputes for Settlement, 13 J. Legal Stud. 1 (1984); Steven Shavell, Suit,
Settlement, and Tria:  A Theoretical Analysis Under Alternative Methods for Allocation of Legal Costs, 11 J. Legal
Stud. 55 (1982); Richard Posner, An Economic Approach to Legal Procedure and Judicial Administration, 2 J. Legal
Stud. 399 (1973).

[3] See, e.g., Richard Reuben, Constitutional Gravity:  A Unitary Theory of Alternative Dispute Resolution and Public
Civil Justice, 47 UCLA L. Rev. 949, 963 (2000); Janeen Kerper, Creative Problem-Solving vs. the Case Method:  A
Marvelous Adventure in which Winnie-the-Pooh Meets Mrs. Palsgraf, 34 Cal. W. L. Rev. 351, 354 (1998); Lisa
Bernstein, Understanding the Limits of Court-Connected ADR:  A Critique of Federal Court-Annexed Arbitration
Programs, 141 U. Pa. L. Rev. 2169, 21_ n. 2 (1993); Roderick W. Macneil, Contract in China:  Law, Practice, and
Dispute Resolution, 38 Stan. L. Rev. 303, 396 (1986).

[4] For a practical description of mediation see Jay E. Grenig, Alternative Dispute Resolution with Forms, § 2.16, 22-
23, §7.1, 116-19 (2d ed., West 1997)

[5] See, e.g. Myra Warren Isenhart & Michael Spangle, Collaborative Approaches to Resolving Conflict 130-33 (Sage
Publications, Inc. 2000).

arbitration,[6] and early neutral evaluation,[7] to name a few.

The second trend is more academic in nature. Scholars over recent decades have discussed the potential of partial recoveries. In particular, they have challenged the prevailing assumption that a court must take a winner-take-all approach to dispute resolution.[8] They have suggested instead that a court could award a portion of the compensation to which a wronged plaintiff would be entitled, discounted to reflect the court's uncertainty about whether the plaintiff should prevail.[9]

EVA improves on the existing proposals for partial recovery in at least two ways. First, scholars have directed their proposals to courts. Voluntary forms of dispute resolution provide a

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[6] Id.

[7] Jay Grenig, Alternative Dispute Resolution with Forms, §2.59, 30, §18.10-.18.1, 323-24 (2d ed, West 1997); Thomas Crowley, Settle it Out of Court: How to Resolve Business and Personal Disputes Using Mediation, Arbitration, and Negotiation 192 (John Wiley & Sons, Inc. 1994).

[8] See, e.g., John E. Coons, Approaches to Court Imposed Compromise—The Uses of Doubt and Reason, 58 Nw. U. L. Rev. 750 (1964); John E. Coons, Compromise as Precise Justice, 68 Calif. L. Rev. 250 (1980), reprinted from Compromise in Ethics, Law, and Politics 190 (J. Roland Pennock & John W. Chapman eds., 1979); Rizzo & Arnold, Causal Apportionment in the Law of Torts;: An Economic Theory, 80 Colum. L. Rev. 1399 (1980); King, Causation, Valuation, and Chance in Personal Injury Torts Involving Preexisting Conditions and Future Consequences, 90 Yale L.J. 1353 (1981); David Kaye, The Limits of the Preponderance of the Evidence Standard: Justifiably Naked Statistical Evidence and Multiple Causation, 1982 Am. B. Found. Res. J. 487; Robinson, Multiple Causation in Tort Law: Reflections on the DES Cases, 68 Va. L. Rev. 713 (1982); Neil Orloff & Jery Stedinger, A Framework for Evaluating the Preponderance-of-Evidence Standard, 131 U. Pa. L. Rev. 1159 (1983); David Rosenberg, The Causal Connection in Mass Exposure Cases: A "Public Law" Vision of the Tort System, 97 Harv. L. Rev. 849 (1984); Steven Shavell, Uncertainty over Causation and the Determination of Civil Liability, 28 J.L. & Econ. 587, 589 (1985); Steven Shavell, Economic Analysis of Accident Law § 5.3, at 115-18 (1987); Charles Nesson, The Evidence or the Event? On Judicial Proof and the Acceptability of Verdicts, 98 Harv. L. Rev. 1357, 1382-85 (1985); Saul Levmore, Probabilistic Recoveries, Restitution, and Recurring Wrongs, 19 J. L. Stud. 691 (1990); Michael Abramowicz, A Compromise Approach to Compromise Verdicts, 89 Calif. L. Rev. 231 (2001).

[9] Coons began with a modest proposal to split an award "fifty-fifty" when a judge was in equipoise between the competing positions of the parties. John E. Coons, Approaches to Court Imposed Compromise—the Uses of Doubt and Reason, 58 Nw. U. L. Rev. 750, 757 (1964). Rosenberg and Shavell explored awarding a plaintiff recovery in proportion to the likelihood that the defendant caused the injury to the plaintiff. David Rosenberg, The Causal Connection in Mass Exposure Cases: A "Public Law" Vision of the Tort System, 97 Harv. L. Rev. 849 (1984); Steven Shavell, Uncertainty Over Causation and the Determination of Civil Liability, 28 J.L. & Econ. 587, 589 (1985). Levmore suggested a hybrid approach that would entail using the standard for recovery recommended by Rosnerberg and Shavell in certain cases involving recurring wrongs (depending on the confidence of the fact finder in the proper outcome of litigation). Saul Levmore, Probabilistic Recoveries, Restitution, and Recurring Wrongs, 19 J. L. Stud. 691 (1990). Abramowicz extended the sources of potential uncertainty beyond causation to other issues of fact (and, to some extent, law) and suggested his own hybrid approach, in which the finder of fact would take a winner-take-all approach or award a partial recovery, depending on the likelihood that plaintiff should win. Michael Abramowicz, A Compromise Approach to Compromise Verdicts, 89 Calif. L. Rev. 231 (2001).

better setting for this kind of creativity.  Parties engage in arbitration only if they select it.[10]

Using a novel standard for resolving disputes thatallparties   have chosen is far less troubling

than having a court impose the new standard, regardless of the parties' preferences.[11]

A second advantage of EVA over existing scholarly proposals is its use of the expected

value of trial.  Scholars have not focused on this measure of partial recovery, usually

recommending instead an award proportionate to the odds that a plaintiff should win,[12] which

has been called "proportionate damages"[13] or "proportional liability."[14]  Drawing on analytic

tools from the academic literature on rights theory, law and economics, and game theory, I argue

that an outcome based on the expected value of trial has virtues absent from other proposals for

partial recovery.

The central claims of this Article pertain to trial:  EVA is likely to be both more attractive

to many disputants and may better approximate justice than trial.  I also show that EVA

compares favorably in various ways to proportionate damages.[15]

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[10] United Steelworkers v. Warrior & Gulf Navigation Co., 363 U.S. 574, 582 (1960).

[11] A creative possibility would be to have the court impose a compromise if the parties so request.  This, however, would not be easy to achieve.  Parties are somewhat constrained in their ability to choose the standard in court. They decide whether to go to trial but, if they do, they at times have to accept imposition of the law as the court interprets it.  See, e.g., Stephen J. Ware, Consumer Arbitration as Exceptional Consumer Law (with a Contractualist Reply to Carrington & & Haagen), 29 McGeorge L. Rev. 195, 207-09 (1998) (noting mandatory rules in court, including strict products liability, the warranty of habitability, usury laws, and certain restrictions on insurance and employment contracts).  Courts may be similarly unwilling to adjust the standard of appellate review to accommodate the desires of disputants.  See Kyocera Corp. v. Prudential-Bache T Servs., 2003 U.S.App. LEXIS 18024 (9th Cir. filed August 29, 2003) (refusing to allow parties to set standard for review in court).  See also Lee Goldman, Contractually Expanded Review of Arbitration Awards, 8 Harv. Negotiation L. Rev. 171 (2003); Margaret M. Maggio & Richard A. Bales,  Contracting around the FAA:  The Enforceability of Private Agreements to Expand Judicial Review of Arbitration Awards, 18 Ohio St. J. Disp. Res. 151 (2002).

[12] Abramowicz relies primarily on this measure, although he does so with a proposed hybrid rule that would at times take a winner-take-all approach.  Citation.

[13] Charles Nesson, The Evidence or the Event?, 98 Harv. L. Rev. 1357, 1382-85 (1985).

[14] David Rosenberg, The Causal Connection in Mass Exposure Cases:  A "Public Law" Vision of the Tort System, 97 Harv. L. Rev. 849, 859 (1984); Steven Shavell, Uncertainty over Causation and the Determination of Civil Liability, 28 J.L. & Econ. 587, 591 (1985).

[15] The juxtaposition to proportionate damages serves various purposes, including to clarify how EVA would work, to emphasize its novel features, and to highlight some of its distinctive virtues.  Still, it should be noted at the outset that the two ideas are not mutually exclusive.  If courts were to award proportionate damages, an arbitrator in EVA could take that into account in assessing the expected value of a case.

Part II first explains how EVA would work and what makes it distinctive.

Part III then describes three likely virtues of EVA. First, EVA would allow parties to insist on their legal rights without the risks of winner-take-all litigation. In doing so, EVA, unlike other forms of partial recovery, does not vary from the average result at trial. This characteristic increases the likelihood of adoption of EVA by all parties to a dispute and means that EVA is true to the conception of justice embodied in current law.

Second, EVA may be better than trial, binding arbitration or the most common proposal for partial recovery at minimizing errors in adjudication. In particular, EVA should produce the same average error across a set of cases as trial (often called "expected error costs"[16]) and should avoid the largest errors that occur at trial. EVA, like trial, also should produce a lower average error across a set of cases (or lower expected error costs) than proportionate damages. In a sense, then, when it comes to minimizing errors in dispute resolution, EVA offers the best of both worlds.

Third, EVA may be more likely than trial to encourage desirable expenditures on litigation and, in particular, may provide incentive for a risk averse party to make those investments in litigation and only those investments that will produce a net gain on average in dollars for thatparty . For this point, I rely on a line of analysis that has not yet been explored in the legal academic literature, one that could have significant implications. To be specific, I use utility functions to assess the interaction between risk aversion, the continuity or discontinuity of results from a standard for dispute resolution, and expenditures on litigation. A similar analysis

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[16] See, e.g., Robert G. Bone, Civil Procedure: The Economics of Civil Procedure 131 (2003). I am assuming that the social cost of an error at trial is the difference between the right result and the actual result. For a similar approach see Richard Posner, An Economic Approach to the Law of Evidence, 51 Stan. L. Rev. 477 (1999).

would be relevant to other fields of the law, including, for example, the choice between contributory and comparative negligence.

Part IV assesses EVA from various theoretical perspectives, including that of an economist, a rights theorist, and those who endorse a "public-life conception"[17] of trial.[18]

Part V responds to some likely concerns about EVA, including whether the results it produces can be reliable and predictable, whether biases may limit its benefits, and how expected value arbitrators are to identify the factors that should and should not inform their awards.

Part VI concludes by recommending that providers of dispute resolution services include EVA as an option for clients.

II.     Defining EVA and How It Would Work.

At the heart of the new form of dispute resolution that I call "Expected Value Arbitration" or "EVA" is the concept of expected value, which is of great use in making decisions that involverisk.  The concept  has found its way into various aspects of legal practice and should be familiar to litigators and potential arbitrators.[19]

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[17] The phrase comes from David Luban.  David Luban, Settlements and the Erosion of the Public Realm, 83 Geo. L.J. 2619, 2634-60 (1995).

[18] Unfortunately, no ready label is available for this last group, as it includes various perspectives.  One possibility, although it is underinclusive, is civil republicanism.  See Joshua P. Davis, Toward a Jurisprudence of Trial and Settlement:  Allocating Attorney's Fees by Amending Federal Rule of Civil Procedure 68, 48 Ala. L. Rev. 65,  124-26 (1996).

[19] A literature has developed commenting on the use by practitioners of risk analysis based on expected value and discussing the topic for the benefit of practitioners.  See, e.g., Jame E. McGuire, Practical tips for using Risk Analysis in Mediation, 53 Dis. Res. J. 15, 21 (1998) (noting familiarity of lawyers with risk analysis); David R. Johnson, Screening the Future for Virtual ADR, 51 Dis. Res. J. 117 (1996) (discussing use of software to assist litigators in undertaking risk analysis based on expected value); Marjorie Corman Aaron & David P. Hoffer, Using Decision Trees as Tools for Settlement, 14 Alternatives to High Cost Litig. 71 (1996) (suggesting analysis for decisions in litigation based on expected value).

A.        Expected Value – A Familiar Concept in the Law.

Expected value is the mean of the possible outcomes in a situation with each outcome weighted by its likelihood of occurring.[20] Expected value finds a natural application in the resolution of legal disputes. The expected value of a trial, for example, is the sum of each possible outcome in a case multiplied by its odds of being adopted by a court.[21]

The concept of expected value may once have been foreign to lawyers. If so, it no longer is. It currentlyhas many practical uses in litigation. It can clarify important decisions, including whether to sue at all and, once in litigation, whether to settle and on what terms.[22]

To see how expected value works, an illustration is worthwhile. Imagine a car accident between Penelope and Dwayne. Penelope claims that Dwayne ran a red light; Dwayne claims that Penelope ran a red light. In either case, the parties agree that they arrived in their cars simultaneously at an intersection and Penelope swerved to avoid a collision. She struck a telephone pole and suffered significant injuries. Dwayne was unharmed. The testimony of each party is the only evidence available regarding fault. Assume Penelope stands a fifty percent chance of persuading a court to award her one hundred thousand dollars and a fifty percent chance of losing. The sum of each possible result multiplied by its likelihood of occurring yields the expected value of trial:  0.5 x $100,000 + .5 x $0 = $50,000. The expected value of trial is $50,000.

This expected value can be helpful in various ways. Penelope would be wise, for

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[20] See John J. Donohue III, Opting for the British Rule, or if Posner and Shavell Can't Remember the Coase Theorem, Who Will?, 104 Harv. L. Rev. 1093, 1096 (1991); Note, Settling for Less:  Applying Law and Economics to Poor People, 107 Harv. L. Rev. 442, 444 (1993).

[21] John J. Donohue III, Opting for the British Rule 104 Harv. L. Rev. at 1096; Settling for Less107 Harv. L. Rev. at 444.

[22] See, e.g., Marjorie Corman Aaron & David P. Hoffer, Using Decision Trees as Tools for Settlement, 14 Alternatives to High Cost Litig. 71 (1996) (discussing use of expected value in settlement negotiations, mediation, and the decision whether to sue).

example, to consider it in deciding whether to sue.[23] Once she calculates an expected value of

$50,000, she should compare that to her cost of litigating. If she expects to expend more than

fifty thousand dollars by the end of trial it will be, on average, a losing proposition. Indeed, even

if she expects her costs to be only $40,000, she will make a net gain of $60,000 half of the time,

but she will suffer a net loss of $40,000 half of the time.[24] In this case, another factor, her

appetite for risk, will be essential in determining if trial is worthwhile. If she is averse to risk,

given the modest net expected value of $10,000, she may prefer not to sue at all.[25] Her decision

will not be easy, and it should account for other factors, including the likelihood that Dwayne

will settle before trial.[26] The key point, however, is that a useful analysis of whether to sue

begins with an estimate of the expected value of trial.

Expected value can play a similar role in assessing whether to make or accept an offer of

settlement. Penelope and Dwayne, for instance, would do well to take it into account in

negotiating.[27] If Penelope is risk-neutral, she should settle for no less than the expected value of

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[23] Id.

[24] Of course, this analysis will be altered if a lawyer accepts her case on the basis of a contingency fee. Still, even under those circumstances, the lawyer will then have the incentives ascribed in the text to the plaintiff and will have significant influence over the plaintiff's actions. For a discussion of a contingency lawyer's decisions in light of risk see, e.g., Peter H. Huang, A New Options Theory for Risk Multipliers of Attorney's Fees in Federal Civil Rights Litigation, 73 N.Y.U. L. Rev. 1943 (1998). Huang's analysis is quite insightful, although it suffers significantly from a failure to incorporate the limited ability of lawyers to cease litigating a case when they have decided it is no longer a good investment.

[25] Scholars generally assume that litigants are averse to risk. See, e.g., Michael Abramowicz, A Compromise Approach to Compromise Verdicts, 89 Calif. L. Rev. 231, 240 & n. 37 (2001). As Abramowicz points out, even litigants who have a taste for risk are unlikely to indulge that taste in protracted litigation and would tend to explore other high risk ventures, like hang gliding or poker. Id. (citing Richard Caswell, Deterrence and Damages: The Multiplier Principle and Its Alternatives, 97 Mich. L. Rev. 2185, 2230 (1999)). Anyone who has seen litigation up close knows that it rarely is the kind of exciting process that one would expect to excite people with an appetite for risk. See also Richard Posner, Economic Analysis of Law § 1.1, 12 (4th ed. 1992).

[26] Anticipation of the possibility of settlement provides an economic explanation of so-called "strike suits," in which a plaintiff brings a claim without merit to extract a settlement on favorable terms from a defendant. For a discussion of this possibility David Rosenberg & Steven Shavell, A Model in Which Suits Are Brought for their Nuisance Value, 5 Int'l Rev. L. & Econ. 3 (1985). For an overview of the problem see Robert G. Bone, Civil Procedure: The Economics of Civil Procedure 45-50 (2003).

[27] In this sense, they will "bargain in the shadow of the law." See Robert Cooter, et al. Bargaining in the Shadow of the Law: A Testable Model of Strategic Behavior, 11 J. Legal Stud. 225 (1982); Robert H. Mnookin & Lewis Kornhauser, Bargaining in the Shadow of the Law: The Case of Divorce, 88 Yale L. J. 950 (1979).

trial less her costs of litigating.[28]  If Dwayne is similarly risk neutral, he should settle for no more

than the expected value of trial plus his costs of litigating.[29]  Of course, aversion to risk may

decrease the minimum amount Penelope will accept or increase the maximum amount Dwayne

will pay.[30]  And these calculations offer only a range within which both parties will do better to

settle than they would on average at trial.  Various other factors will determine where in the

range the parties resolve their dispute, if they do at all, including their skill at negotiations, their

willingness (or apparent willingness) to endure the costs and risks of litigation, and their

psychological needs and desires.[31]  Still, what matters for present purposes is that the expected

value of trial is an important point of departure in settlement negotiations.

None of this is new.  Academics have long known that expected value is fundamental in

taking a systematic approach to decisions involving risk. [32]  Litigation always involves risks of

one sort or another.  It is therefore unsurprising that many lawyers have come to recognize the

use of expected value in counseling clients, in making their own decisions whether to accept or

continue to prosecute cases, and in crafting settlement offers. [33]  Because of these uses, lawyers

should feel comfortable enough with the concept to recommend to clients that they enter into

EVA.  Further, arbitrators should be available who are experienced both in practicing in a given

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[28] For a standard analysis along these lines see Richard Posner, Economic Analysis of Law § 21.5, 554-56 (4th ed. 1992).

[29] Id.

[30] Id. at 557.

[31] For a discussion of the role of strategic behavior in the amount for which parties settle see, e.g., Douglas G. Baird et al., Game Theory and the Law 79-158 (1994).

[32] See, e.g., Richard Posner, Economic Analysis of Law § 21.5, 554-56 (4th ed. 1992); George L. Priest & Benjamin Klein, The Selection of Disputes for Settlement, 13 J. Legal Stud. 1 (1984); Steven Shavell, Suit, Settlement, and Tria:  A Theoretical Analysis Under Alternative Methods for Allocation of Legal Costs, 11 J. Legal Stud. 55 (1982); Richard Posner, An Economic Approach to Legal Procedure and Judicial Administration, 2 J. Legal Stud. 399 (1973).

[33] See, e.g., Jame E. McGuire, Practical Tips for Using Risk Analysis in Mediation, 53 Dis. Res. J. 15, 21 (1998) (noting familiarity of lawyers with risk analysis); David R. Johnson, Screening the Future for Virtual ADR, 51 Dis. Res. J. 117 (1996) (discussing use of software to assist litigators in undertaking risk analysis based on expected value); Marjorie Corman Aaron & David P. Hoffer, Using Decision Trees as Tools for Settlement, 14 Alternatives to High Cost Litig. 71 (1996) (suggesting analysis for decisions in litigation based on expected value).

area of the law and in assigning an expected value to a case.

B.      EVA is a Distinct Form of Dispute Resolution.

EVA, then, could be a practical form of dispute resolution that draws on the experience

lawyers have with expected value in various litigation contexts.  Nevertheless, it is a novel

proposal.  This is in part because, unlike the most common forms of dispute resolution, Expected

Value Arbitration *imposes* a *compromise*.  To understand this claim, it is important to explore the

two distinctions on which it relies:  between imposed and voluntary outcomes and between

determined and compromised outcomes.

1.  Imposed versus Voluntary Outcomes.

A first useful distinction is between forms of dispute resolution in which parties have an

outcome imposed on themand  those in which the parties must accept an outcome voluntarily.  In

EVA, an arbitrator imposes an outcome on the parties.  They have no choice but to accept it.  In

this regard, EVA resembles trial or traditional binding arbitration.[34]  In settlement or mediation,

in contrast, the parties must accept an outcome voluntarily before it can bind them.

Note that, as used here, the terms "voluntary" and "imposed" describe how the parties

reach a particular outcome for resolving their dispute, not how they choose the method of dispute

resolution.  Binding arbitration, for example, is a voluntary *process* for resolving a legal claim.

Both parties must agree to arbitratefor  the result to bind them.[35] Trial, in contrast, is often

imposed on a party against its will.  Nevertheless, much like a court in trial, at the end of the day,

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[34] For a discussion of binding arbitration see generally Thomas E. Crowley, Settle It Out of Court:  How to Resolve Business and Personal Disputes Using Mediation, Arbitration, and Negotiation 171-73 (John Wiley & Sons 1994); Myra Warren Isenhart & Michael Spangle, Collaborative Approaches to Resolving Conflict 130-33 (Sage Publications, Inc. 2000).

[35] United Steelworkers v. Warrior & Gulf Navigation Co., 363 U.S. 574, 582 (1960).

the arbitrator imposes an *outcome* on the parties.[36] Thus, binding arbitration, like trial, involves imposed outcomes.

2.  Compromised versus Determined Outcomes.

A second distinction is between compromised and determined outcomes. Expected Value Arbitration involves a form of compromise. The decision-maker does not choose one party's version of the facts and the law or even a third independent view. Rather the decision-maker compromises among the various plausible interpretations of the facts and the law, creating an average by weighting each possible outcome at trial according to its likelihood of occurring.[37] In trial and traditional binding arbitration, in contrast, the decision-maker, at least officially, adopts a particular view of the law, finds the facts, and applies the law to the facts.[38] In other

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[36] Imposed outcomes should not be confused with situations where a method of dispute resolution is imposed on the parties, although an outcome is not. The parties, for example, may be required to participate in a mediation process before trial, although the process may prove unsuccessful and any result would have to be accepted by the parties voluntarily. See, e.g., Lisa Bernstein, Understanding the Limits of Court-Connected ADR: A Critique of Federal Court-Annexed Arbitration Programs, 141 U. Pa. L. Rev. 2169 (1993).

Similarly, a voluntary resolution of a dispute may require enforcement by a third party. One party may have to pursue litigation to enforce the terms of a settlement agreement. The settlement agreement itself, however, would constitute a voluntary result.

Additionally, some outcomes may blur the line between voluntary and imposed. If the parties settle after resolution of a potentially dispositive motion – or, as often occurs, after the judge has threatened each side with an adverse result on, for example, a motion for summary judgment or to dismiss – the outcome might be described as partially voluntary and partially imposed. Little turns on the existence of this grey area.

[37] My definition of the term "compromise" is somewhat broader than the focus of Abramowicz. See Abramowicz, Compromise Approach, 89 Calif. L. Rev. at 236 & n. 24. It includes any decision that does not choose among competing understandings of the facts or the law, whether the decision relies on a single determination of the odds that the plaintiff should win or splits the difference between different views of those odds. Abramowiz focuses on the former while recognizing the latter. Id.

[38] This view is consistent with the Supreme Court's position that arbitration merely changes the process for deciding a case, not the substantive standard. See, e.g., Mitsubishi Motors Corp. v. Soler Chrysler-Plymouth, Inc., 473 U.S. 614, 628 (1985). On the other hand, as Stephen Ware points out, many arbitrators and the parties who appear before them believe arbitrators do not act as if they are bound by the law. See, e.g., Ware, Default Rules from Mandatory Rules, 83 Minn. L. Rev.at 720 nn. 78-81 (citing Soia Mentshikoff, Commercial Arbitration, 61 Colum. L. Rev. 846, 861, 867 (1961); I Gabriel M Wilner, Domke on Commercial Arbitration 25.01, at 391 (rev. ed. 1995); Dean B. Thomson, Arbitration Theory and Practice: A Survey of AAA Construction Arbitrators, 23 Hofstra L. Rev. 137, 154-55 (1994); John S. Murray, Alan Scott Rau & Edward F. Sherman, Processes of Dispute Resolution 514, 636 (2d ed. 1996); IV Ian R. Macneil, Richard E. Speidel & Thomas J. Stipanowich,, Federal Arbitration Law 40.5.2.4, at 40:47 (1994); Harry T. Edwards, Arbitration Employment Discrimination Cases: An Emprical Study, in Proceedings of the Twenty-Eighth ANNUAL MEETING OF THE NATIONAL ACADEMY OF ARBITRATORS 59 (1975); Patricia A. Greenfield, How Do Arbitrators Treat External Law?, 45 Indus. & Lab. Rel. Rev. 683, 688 (1992); Edward Brunet, Arbitration and Constitutional Rights, 71 N.C. L. Rev. 81, 85 (1992)).

words, the decision-maker is supposed to determine all legal and factual issues. Settlement and mediation, much like Expected Value Arbitration, will ordinarily involve a compromise that takes into account uncertainty about how a decision-maker would resolve ambiguous issues.[39]

The following chart suggests the possible combinations of these characteristics in the most prevalent forms of dispute resolution:

|  | **Imposed** | **Voluntary** |
|---|---|---|
| **Compromised** | ? | Mediation<br><br>Settlement |
| **Determined** | Trial<br><br>Traditional Binding Arbitration | ? |

These common forms of dispute resolution pair two distinct notions. They assume that voluntary outcomes must be compromised and that imposed outcomes must be determined. But this need not necessarily be so.

To be sure, a voluntary and determined outcome is difficult to imagine. A party will likely reject a determined result that is worse for it than it is likely to do on average at trial. If one party agrees to a result "determined" by someone else, strategic dynamics are likely to have

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[39] Of course, these definitions of voluntary, imposed, determined and compromised do not follow necessarily. They are merely useful. Moreover, a chosen approach to an outcome is neither irrevocable nor absolute. Parties may receive some imposed determinations on issues that decrease the scope of disagreement and lead to settlement.

Further, whether determined or compromised, an imposed outcome will often not be the final stage in resolving a dispute. It may well leave the parties with opportunities for negotiating for their mutual benefit. Indeed, the negotiations may result in a second-stage voluntary outcome that reflects the cost of enforcing the imposed outcome from the first stage. For purposes of clarity and simplicity, I do not attempt to capture these complexities in the chart.

caused this coincidence rather than a willingness to accept an objective determination of the right result.[40]

The other uncommon pairing of characteristics—an imposed compromise—is more plausible. Parties could reasonably decide that they do not want a decision-maker to choose one among the various possible resolutions of each contested legal and factual issue. Once they make that decision, a winner-take-all trial will not do. Instead, they could enter binding arbitration. They could then develop their case through the usual discovery and legal research, and present their positions through documents, witnesses, and legal argument. Some ambiguities might be cleared up, while others endure. Nothing need be novel about this process. The only necessary variation from trial or traditional binding arbitration would be that the parties would instruct the arbitrator at the outset not to resolve ambiguities of fact or law. The arbitrator instead would award a compromise that incorporates uncertainty. EVA entails this kind of imposed compromise.

EVA, then, would provide a distinctive form of dispute resolution because it would impose a compromise.[41] Some other academic proposals share these qualities, but EVA varies

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[40] Mediation, as opposed to settlement, at least involves a third party capable of making an independent evaluation of the likely results of trial. But if the mediator is willing to make any evaluation at all, Cite to debate beginning with Riskin, she is likely to predict what different judges or juries might do, not to offer a particular perspective on the facts and the law. A party to mediation has little reason to accept a determination that is the mediator's view of the right result, and that is more favorable to the other party than a prediction of how others on average would decide the case.

The form of dispute resolution that may most closely approximate a voluntary, determined outcome is Early Neutral Evaluation (often called "ENE"). In ENE, an evaluator may request an informal presentation of each party's position and ask questions to solicit additional information. Rosenberg and Folberg, Alternative Dispute Resolution: An Empirical Analysis, 46 Stan. L. Rev. 1487, 1490-91 (1994). The evaluator may then make an assessment of the strengths and weaknesses of the case, including a likely range of damages if the plaintiff were to prevail. The parties in turn may use this assessment to facilitate negotiations. Indeed, the evaluator may even reach some determinations regarding ambiguous factual or legal issues. Still, little incentive exists for the party losing on an issue to accept such a determination. For this reason, any settlement in ENE is likely to use the neutral party's assessment as a point of departure for negotiations, not as the ultimate standard by which to resolve a case. The outcome of ENE is therefore unlikely to be determined by a neutral party.

On the other hand, perhaps this is just an artifact of our culture. See, e.g., Rebecca Redwood French, The Golden Yoke: The Legal Cosmology of Buddhist Tibet 137-40 (1995) (describing outcomes of formal adjudication in Buddhist Tibetan legal system as requiring consent of disputants).

from those proposals in essential ways as well.

C.     EVA Is Unlike Other Proposals for Partial Recovery.

Over the last forty years or so, the idea of an imposed compromise has received episodic attention in academic legal circles. Professor John Coons initiated this intermittent discussion in 1964 with his germinal article, <u>Approaches to Court Imposed Compromise—the Uses of Doubt and Reason</u>.[42] Coons suggested the possibility of "splitting the difference" in cases where the position of the plaintiff and defendant were in perfect equipoise—that is, the decision-maker had no principled basis for deciding between two equally compelling positions.[43] To "split the difference," he would award a plaintiff half the amount she would receive if she prevailed in winner-take-all adjudication.[44] Coons returned to the subject on occasion,[45] but other scholars did not engage him.[46] Then, in the 1980s, a burst of interest, largely among economists, led to several important articles exploring various properties of imposed compromise.[47] The focus of discussion was the idea of awarding a plaintiff recovery in proportion to the likelihood that a

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[41] Some variants on imposed compromise exist already. They include interest arbitration, novel procedures in arbitration (including final-offer arbitration), and unspoken compromises (which many people believe sometimes occur in jury awards and traditional arbitration). As discussed below, however, EVA is different from all of these, for, unlike the existing forms of imposed compromise, it embodies an *objective* view of the parties' legal rights. See infra Part III.A.

[42] 58 Nw. U. L. Rev. 750 (1964).

[43] Id. at 759.

[44] Id. at 757.

[45] See John E. Coons, Compromise as Precise Justice, 68 Calif. L. Rev. 250 (1980, reprinted from Compromise in Ethics, Law, and Politics 190 (J. Roland Pennock & John W. Chapman eds., 1979).

[46] An array of distinguished scholars responded to Coons' initial proposal as is memorialized in part in the pages of the Northwestern Law Review. See Comments on Approaches to Court Imposed Compromise—The Uses of Doubt and Reason, 58 Nw. U. L. Rev. 795-804 (1964). The discussion is interesting and provocative but does not seem to have inspired the participants to write on the topic.

[47] Notable contributions include David Kaye, The Limits of the Preponderance of the Evidence Standard: Justifiably Naked Statistical Evidence and Multiple Causation, 1982 Am. B. Found. Res. J. 487; Neil Orloff & Jery Stedinger, A Framework for Evaluating the Preponderance-of-Evidence Standard, 131 U. Pa. L. Rev. 1159 (1983); David Rosenberg, The Causal Connection in Mass Exposure Cases: A "Public Law" Vision of the Tort System, 97 Harv. L. Rev. 849 (1984); Steven Shavell, Uncertainty over Causation and the Determination of Civil Liability, 28 J.L. & Econ. 587, 589 (1985); Steven Shavell, Economic Analysis of Accident Law § 5.3, at 115-18 (1987); Charles Nesson, The Evidence or the Event? On Judicial Proof and the Acceptability of Verdicts, 98 Harv. L. Rev. 1357, 1382-85 (1985).

particular defendant caused the harm that a plaintiff suffered.[48] After this fit of activity, the topic again faded from the academic landscape. Then, in 1990, Professor Saul Levmore offered new insights on the topic, noting particular problems with a winner take-all approach in certain cases involving recurring wrongs.[49] He suggested a hybrid approach that would ask a fact finder to choose between a winner-take-all approach, proportionate damages, or a form of restitution, depending on the fact finder's confidence in the right outcome at trial.[50] Most recently, Professor Michael Abramowicz has made a fine contribution to the literature in A Compromise Approach to Compromise Verdicts[51] expanding the analysis beyond causation to other forms of factual uncertainty[52] (and, to a lesser extent, uncertainty about the law[53]) and recommending his own hybrid approach in which a jury would award proportionate damages if its confidence in the right result fell below a predetermined threshold or an all or-nothing outcome if its confidence exceeded that threshold.[54]

EVA deviates from all of the past proposals for imposed compromise in at least two important respects: first, the standard it would impose is based on the expected value of trial, a measure that has been largely overlooked in the literature; and, second, EVA contemplates imposition of a compromise result in alternative dispute resolution, not in court.

i.       EVA Uses a Different Standard than the Existing Proposals.

Throughout the history of proposals to impose compromise outcomes on parties, scholars have focused on the possibility of awarding the plaintiff a recovery in proportion to its likelihood

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[48] Kaye, 1982 Am. B. Found. Res. J. at 493; Rosenberg, 97 Harv. L. Rev. at 859; Shavell, J.L. & Econ. at 589.
[49] Probabilistic Recoveries, Restitution, and Recurring Wrongs, 19 J. Legal Stud. 691 (1990).
[50] Id. at 692, 721-25.
[51] 89 Cal. L. Rev. 231 (2001).
[52] Id.
[53] Id. at 298-312. But note that Coons originally discussed the possibility of considering legal uncertainty in compromise outcomes. See Coons, Approaches to Court Imposed Compromise, 58 Nw. L. Rev. at 764-73.
[54] Abramowicz, A Compromise Approach to Compromise Verdicts, 89 Cal. L. Rev. at 237.

of being right. [55] This approach has been called at times proportional liability[56] or proportionate damages.[57] It is materially different from EVA, which imposes a compromise based on the likelihood of the different outcomes at trial, which I will call an "expected value" outcome or result.

The distinction between an award based on what I call an expected value outcome and proportionate damages is significant both in theory and in practice. The theoretical difference is that EVA recognizes uncertainty in legal decision-making and awards a plaintiff a recovery that reflects the different possible conclusions different decision-makers might reach. One jury might find a plaintiff with the burden of proof has a fifty-five percent chance of being right and award a full recovery. Another might find the same plaintiff has a forty-five percent chance of being right and award nothing. A decision-maker who believes these outcomes are equally likely does not choose between them in EVA. Rather she takes both into account and awards half of the plaintiff's full recovery. The award leaves intact uncertainty about the odds that the plaintiff should win.

Proportionate damages, and other common proposals for partial recovery, are less radical in this regard. They do not leave the uncertainty in a case intact. The decision-maker is to

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[55] See Kaye, at 493 (suggesting award in proportion to likelihood of causation); Rosenberg, 97 Harv. L. Rev. at 859 (same); Shavell, 28 J.L. & Econ. at 589 (same); Lemvore, at 692; Abramowicz at 236 (recommending award in proportion to likelihood plaintiff is right in light of factual uncertainty in certain cases). David Kaye writes of an "'expected value' rule," Kaye, Preponderance of Evidence Standard, 1982 Am B. Found. Res. J. at 493, but his meaning in this regard is the likelihood that the plaintiff should recover, not the likelihood that the plaintiff would win at trial. 1982 Am. B. Found. Res. at 493. This is one variation on the proposal for awards in proportion to the likelihood that the plaintiff is right. Finally, while Abramowicz does discuss briefly use of the expected value of trial for legal uncertainty, Compromise Verdicts at 301, most of his discussion—and essentially all of his critical analysis—is directed at a standard that varies between awarding proportionate damages and the traditional winner-take-all result imposed by courts.

   Finally, Levmore's discussion of the possible use of restitution to deal with uncertainty appears to be distinctive. 19 J. Legal Stud. at 710-21. I do not explore it in this Article.

[56] David Rosenberg, The Causal Connection in Mass Exposure Cases: A "Public Law" Vision of the Tort System, 97 Harv. L. Rev. 849, 859 (1984); Shavell at .

[57] Charles Nesson, The Evidence or the Event?, 98 Harv. L. Rev. 1357, 1382-85 (1985).

decide the likelihood that the plaintiff is correct. The plaintiff has a forty-five percent chance of being right, a fifty-five percent chance, or a chance reflected in some other precise figure. The decision-maker must choose. She may have doubts about her decision. But in awarding damages, she resolves these doubts. Shereaches a compromise result only in the sense that the recovery she awards will reflect her view of the likelihood that the plaintiff should win. Her award will not embody the different conclusions that other decision-makers might reach.[58]

The difference between expected value outcomes and proportionate damages also has practical significance. It can have a large impact on a plaintiff's recovery. To see this, consider a variation on the hypothetical involving Penelope and Dwayne. Assume, as we did above, a dispute between Dwayne and Penelope over a car accident. Recall that the crux of the controversy was over who ran a red light. Further assume that a finding in favor of Penelope on liability would result in an award of $100,000. The tricky question is whether Dwayne is liable.

In deciding liability, the burden of persuasion falls on Penelope, who must prove her case by a preponderance of the evidence. [59] In other words, the finder of fact should decide in favor of Penelope if she is more likely than not correct about what occurred.[60] Assume that Penelope and

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[58] The difference is much like the one sometimes used to distinguish risk and uncertainty. See, e.g., David Gauthier, Morals by Agreement 24, 42 (1986). Risk means the odds are known but the outcome is uncertain. Flipping a fair coin involves risk. We know that the odds are fifty percent that heads will win. We do not know on which side the coin will land. Proportionate damages incorporate risk: they assume that the decision-maker knows the odds that the plaintiff should win and adjusts the recovery in light of those odds. Uncertainty means that the odds are unknown. Flipping a coin which one suspects may be weighted toward one side involves uncertainty. We do not know what the odds are that heads will win. Expected value outcomes incorporate uncertainty: they adjust a recovery to reflect different possible interpretations of the odds that the plaintiff should win. This distinction provides a useful analogy, but I do not limit my use of the terms "risk" and "uncertainty" to these technical definitions.

[59] This is the usual standard in civil cases. See generally, James, Burdens of Proof, 47 Va. L. Rev. 51, 52-53 (1961). Of course other burdens of proof—or, more precisely, of persuasion—apply in special circumstances.

[60] Some scholars have questioned this straightforward approach to the preponderance-of-evidence standard. See, e.g., Ronald Allen, *A Reconceptualization of Civil Trials*, 66 B.U. L. Rev. 401, 426-27, 434-35, 436-37 (1986) (comparing burden of proof as assessment of certainty jurors have in plaintiff's story); Neil Cohen, *Confidence in Probability: Burdens of Persuasion in a World of Imperfect Knowledge*, 60 N.Y.U. L. REV. 385 (1985) (distinguishing between the probability that event occurred, and confidence in that probability judgment); Lea Brilmayer & Lewis Kornhauser, *Quantitative Methods and Legal Decisions*, 46 U.CHI.L. REV. 116 (1978)

Dwayne both claim they were certain that they saw that the light was green when they entered the intersection. In addition, a disinterested witness, Wanda, who was walking nearby, says that she saw the accident and that she is unsure but believes thatDwayne was at fault. For this opinion, she relies on her view of the light in her peripheral vision.

The role of self-interest in Penelope's and Dwayne's statements, and the admitted lack of confidence of the only objective witness, may translate into uncertainty on the part of the finder of fact. It would be difficult to deny that there is some possibility that the light was green for Dwayne. On the other hand, rare would be a jury that would find for Dwayne in light of Wanda's testimony as the sole witness with no stake in the case. Although the evidence may weigh in favor of Penelope only to the extent that there is, say, a seventy percent likelihood that Dwayne is at fault, nine out of ten juries might agree that Penelope has met her burden of proof.[61] The great majority of juries might be unsure that Dwayne ran the red light but be confident that it is more likely than not that he did so. If the case were to go to trial, then, Penelope would have a ninety percent chance of winning $100,000.

This hypothetical provides a basis for distinguishing possible approaches to imposing a compromise. Under proportionate damages, Penelope would be entitled to recover an amount equal to the odds that she is right multiplied by her recovery if she should win. Under the hypothetical facts she should receive 70% of $100,000, or $70,000.

Expected value in EVA, in contrast, asks not about the odds that the plaintiff is correct, but about the average result of trial. That is calculated by multiplying the likelihood of each result by the amount the plaintiff would recover and adding the products together. In this case, a

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(questioning connection between probability and burden of proof). As this Article does not argue for or against proportionate damages, I need not address this issue.

[61] Abramowicz suggests a relationship along these lines between the odds of a plaintiff winning and the odds that a plaintiff should win. Abramowicz, A Compromise Approach to Compromise Verdicts, 89 Calif. L. Rev. at 231 at 241-42.

ninety percent chance of recovering $100,000 and a ten percent chance of recovering nothing is worth: .90 x $100,000 + .10 x $0 = $90,000. The arbitrator in EVA should award $90,000 to Penelope.

Thus, proportionate damages and EVA are different in principle and can produce quite different outcomes in practice. Before working through the full implications of the difference between the two, it is important to discuss a second novel characteristic of EVA—it involves arbitration, not trial.

ii. EVA Is a Realistic Proposal Because It Is a Form of Arbitration.

EVA, unlike existing academic proposals, would not require a court to impose a compromise. Instead, parties to a dispute would choose to have an arbitrator do so. This greatly enhances its likelihood of adoption.

a. Problems with Use of Imposed Compromise by a Court.

Several obstacles confront any effort to have a court impose a compromise. One issue arises if the compromise result is to be reached by a jury, as Professor Abramowicz recommends.[62] This proposal risks running afoul of the right to trial by jury. In federal court, for example, the Seventh Amendment guarantees parties the right to have a jury sit as the finder of fact in certain cases.[63] Historical practice at times has played a central role in interpretation of the Seventh Amendment.[64] Historically, juries have not been instructed to impose compromises,

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[62] Abramowicz at 250-55.
[63] U.S. Constituion, 7th Am.
[64] A typical use of history arose in this regard in the debate over whether an exception exists to the right to trial by jury in complex cases. See, e.g,. In re Japanese Elec. Prod. Antitrust Litig., 631 F.2d 1069, 1080-83 (3rd Cir. 1980). Similarly, the Supreme Court took a particularly strict originalist approach in rejecting the use of additur as violating the Seventh Amendment in Dimick v. Scheidt, 293 U.S. 474 (1935). Whether this is the best way to proceed is debatable. What seems clear is that courts do in fact at times take an originalist approach to the Seventh Amendment. This could raise an issue for asking a jury to impose a compromise verdict in court.

but to reach a particular conclusion.  It is possible that asking a jury to do so would change its

essential function and violate an objecting party's constitutional rights.[65]

Moreover, even if a judge finds no constitutional violation, imposing compromise would

be difficult to reconcile with existing doctrine.  After all, the practice is longstanding of taking a

winner-take-all approach to litigation.  In our common law system, the persistence of a practice

is its own rationale against change.  Thus, whether a party asks a judge or a jury to impose a

compromise, tradition provides a powerful reason for judicial resistance.

This inertia is likely to be particularly difficult to overcome if judges have the intuition

that imposing compromise is unjust.  That is precisely the intuition they are likely to have.  This

is manifest in how infrequent it is that a judge explicitly imposes a compromise in a case and in

resistance by the rest of the judiciary in the rare instances in which a judge does so. [66]

More generally, lawyers and legal scholars seem to bristle at the notion of imposing

compromise.  To many, it just seems wrong.[67]  I discuss in Parts III and IV reasons to question

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[65] It is true that courts have varied the burden of persuasion that juries are to use and that in some cases the law has
even varied whether the jury should adopt a winner-take-all approach to such issues as causation.  See, e.g., Sindell
v. Abbott Labortories, 26 Cal. 3d 588, cert. denied, 449 U.S. 912 (1980).  In discussing *Sindell*, courts did not seem
concerned about the right to trial by jury but, then again, it does not appear that any party raised the issue .
[66] Consider *Sindell*, likely the most renowned case involving some form of imposed compromise.  It has met with
limited acceptance.  See, e.g., Andrew B. Nace, Note:  Market Share Liability:  A Current Assessment of a Decade-
Old Doctrine, 44 Vand. L. Rev. 395, 396 (1991) (noting that as of 1991 market share liability has been adopted in
only five states other than California and use of the doctrine had largely been confined to DES, the product at issue
in *Sindell*).   Part of the reason may be simply that it varied from the usual winner-take-all approach of trial.
    A similar famous example is Alcoa.  The judge there relied on the doctrine of impracticability to impose an
outcome that split the difference between the parties.  Aluminum Co. of America v. Essex Group, 499 F.Supp. 53
(W.D. Pa. 1980).  Alcoa did not have much of an influence on the judiciary.  Indeed, one scholar reports that judges
within the same circuit have treated Alcoa as having no more precedential value than "a law review article," which,
it is to be inferred, isn't very much.  Wladis, Impracticability as Risk Allocation:  The Effect of Changed
Circumstances Upon Contract Obligations for the Sale of Goods, 22 Georgia L. Rev. 503 (1988).  This was no doubt
in part because the parties settled while the appeal was pending and moved successfully to have the trial court's
opinion vacated.  Id. at 586 n. 333.  Perhaps it was also in part due to its use of a compromise result.
[67] This was in part the response of no less a scholar than Lon Fuller in a conference that addressed John Coons'
paper, Approaches to Court Imposed Compromise.  Fuller stated a concern that compromise results based on factual
uncertainty might be particularly appealing to a dishonest witness, who could muddy the waters sufficiently to enjoy
some success under a "split-the-difference" rule without committing to such a strong statement that it would be
possible to prove that the perjurer lied.  58 Nw. L. Rev. 731, 798-99.  This view does not seem to have much logical
force.  There is little reason to think that the marginal gain on average to a perjurer from being vague and deceptive

this resistance to compromise. But that the judiciary would be reluctant adopt compromise as a standard for dispute resolution is difficult to deny.[68] Indeed, this may explain the paucity of doctrines that award partial recovery, notwithstanding the strong arguments in their favor, at least in some circumstances.[69]

b.       Advantages to Imposing Compromise in Arbitration.

In every regard arbitration provides a more hospitable environment than trial for experimenting with imposed compromise.

1. The Enforceability of EVA in Court.

One of the clearest contrasts between use of imposed compromise at trial and in arbitration is the enforceability of the outcome. Whereas the very real prospect of a *de novo* appeal confronts a judge who has imposed a compromise,[70] the standard for review of an arbitral award is extraordinarily deferential.[71] In general, the U.S. Supreme Court has recognized a "liberal federal policy favoring arbitration agreements."[72] This deference has meant that the

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should be greater in litigation leading to a compromised as opposed to a winner-take-all result. Such deception might make a marginal difference on the recovery of the plaintiff if the outcome is an imposed compromise. The odds of it having a similar effect on winner-take-all litigation may be smaller, but when it does nudge the plaintiff past the threshold of the burden of persuasion, its effect on a case will be far more dramatic. It is not clear that either system would give a systematically greater advantage to those willing to resort to strategic mendacity. Fuller's reaction is perhaps better understood instead as reflecting intuitive doubts about compromise results, which seem to be quite common.

[68] In addition to these difficulties, there is the problem that courts may not be well-suited to conducting experiments. This may be true in part because it is difficult for a judge to test application of a new approach in a single case or group of cases. Courts usually seek to declare a rule that will apply generally. As a result, for a court to impose compromise in a particular instance suggests its application in other cases as well. This is a step that even judges otherwise inclined to innovate may be unwilling to take.

[69] The fact is that despite the strong arguments in favor of imposed compromise by such respected scholars as Coons, Rosenberg, Shavell, Levmore, Abramowicz, and others, the standard has not been widely adopted by courts.

[70] The proper standard for decision-making in a trial court is a legal question. See, e.g., Grogan v. Garner, 498 U.S. 279 (1991). It is an issue on which the trial court judge is entitled to no deference on appeal. See, e.g., U.S. v. Mississippi Valley Generating Co., 364 U.S. 520, 526 (1961) (questions of law are reviewed de novo on appeal).

[71] See generally Stephen L. Hayford, Law in Disarray: Judicial Standards for Vacatur of Commercial Arbitration Awards, 30 Ga. L. rev. 731 (1996) (recognizing the great deference courts show to arbitration awards); Stephen J. Ware, Default Rules from Mandatory Rules: Privatizing Law Through Arbitration, 83 Minn. L. Rev. 703 (1999) (arguing that courts allow parties and arbitrators to create new legal standards through arbitration).

[72] Alabama v. Randolph, 531 U.S. 79, 91 (2000) (quoting Moses H. Cone Memorial Hospital, 460 U.S. 1, 24 (1983)). See also Gilmer v. Intestate/Johnson Lane Corp., 500 U.S. 20, 26 (1991).

great majority of arbitration decisions survive judicial review.[73]  As a result, if the parties choose

to enter into EVA, whoever prevails is very likely to have the full force of the judiciary behind

the result.

The limited grounds for upsetting arbitration decisions would seem not to be an obstacle

to EVA, except in rare cases where an arbitrator fails egregiously to perform her duties properly.

To see this, consider the analysis if the Federal Arbitration Act ("FAA") applies.[74]  Courts have

recognized two sources in vacating arbitration decisions under the FAA.  First, the FAA itself

offers four grounds, all of which one might call procedural:  (1) when the award was procured by

corruption, fraud or undue means; (2) when the arbitrator's conduct exhibited evidence partiality

or corruption of the arbitrator; (3)when  the arbitrator was guilty of misconduct or misbehavior

prejudicing the rights of a party; and (4) when an arbitrator exceeded her powers or so

imperfectly executed them as to fail to make a final determination.[75]  None of these grounds

should prevent enforcement of EVA in general.  As long as an arbitrator is impartial and follows

the instructions of the parties, the award should stand.[76]

In some jurisdictions, courts have developed additional grounds for vacating arbitration

awards.[77]  In theory, these grounds could pose a problem for EVA, as they provide a basis for

challenging an award based on, if you will, the substantive standard used by the arbitrator.  The

most likely potential basis for a challenge may be by claiming that EVA entails a "manifest

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[73] See generally Stephen J. Ware, Default Rules from Mandatory Rules:  Privatizing Law Through Arbitration, 83 Minn. L. Rev. 703 (1999); Stephen L. Hayford, Law in Disarray:  Judicial Standards for Vacatur of Commercial Arbitration Awards, 30 Ga. L. Rev. 731 (1996).

[74] United States Arbitration Act of 1925, Pub. L. No. 68-401, 43 Stat. 883 (codified as amended at 9 U.S.C.A. 1, et seq. (2003)).

[75] 9 U.S.C. §10(a).

[76] Moreover, as noted above, in assessing the statutory grounds for vacatur, courts tend to be quite deferential to arbitrators.  See, e.g., United Paperworks Int'l Union v. Misco, Inc., 484 U.S. 29, 38 (1987); Southland Corp. v. Keating, 465 U.S. 1, 10 (1984).

[77] Some jurisdictions have refused to recognize any non-statutory grounds for vacating arbitration awards.  See, McIlroy v. PaineWebber, Inc., 989 F.2d 817, 820 n.2 (5th Cir. 1993).

disregard for the law."[78]  Some courts have recognized this doctrine.[79]  It typically requires

showing both that the arbitrator has made an error that is so obvious it would be readily and

instantly perceived by a typical arbitrator and that the arbitrator was subjectively aware of the

proper legal standard and disregarded it in fashioning an award.[80]

One might argue that EVA entails a manifest disregard for the law.  It asks an arbitrator

not to try to determine the single right legal result or the single best view of the evidence.  The

very candor of EVA about the form of compromise it entails may make it vulnerable in a way

that arbitration awards based on implicit compromises are not.[81]

Still, it is hard to imagine that awards from EVA would not be enforced in practice, even

in jurisdictions recognizing "manifest disregard for the law" as a grounds for vacatur.  First, the

deference that courts show to arbitrators has meant, according to Professor Stephen Hayford, that

as of 1996 no commercial arbitration award had been vacated based on a "manifest disregard"

for the law.[82]  Other scholars have noted that through 2000 or later fewer than a half-dozen cases

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[78] This ground traces its lineage back to cryptic dictum in Wilko v. Swan, 346 U.S. 427, 436 (1953).  The doctrine of "manifest disregard" has outlived the Wilko opinion itself.  See Rodriguez de Quijas v. Shearson/American Express, 490 U.S. 477 (1989) (overruling Wilko).

[79] See, e.g., Kanuth v. Prescott, Ball & Turben,Inc., 949 F.2d 1175, 1182 (D.C. Cir. 1991); Merrill Lynch, Fenner & Smith, Inc. v. Bobker, 808 F.2d 930, 933-34 (2d Cir. 1986); San Martine Compania de Navegacion v. Saguenay Terminals Ltd., 293 F.2d 796, 801 (9th Cir. 1961).

[80] See, e.g., Raiford v. Merrill Lynch, Pierce, Fenner & Smith, Inc., 903 F.2d 1410 (11th Cir. 1990).  One court reports that every Circuit other than the Fifth has adopted this standard.  Montes v. Shearson Lehman Brothers, Inc. 128 F.3d 1456, 1460 (11th Cir. 1997).

[81] Cf. Stephen J. Ware, Default Rules from Mandatory Rules:  Privatizing Law Through Arbitration, 83 Minn. L. Rev. 703, 724 & nn. 94-97 (1999) (arguing that arbitral awards will be vacated only if they involve egregious errors by an arbitrator who consciously disregards the law).

[82] Stephen L. Hayford, Law in Disarray:  Judicial Standards for Vacatur of Commercial Arbitration Awards, 30 Ga. L. Rev. 731, 776 & nn. 197-98 (1996) (citing Brad A. Galbraith, Note, Vacatur of Commercial Arbitration Awards in Federal Court:  Contemplating the Use and Utility of the "Manifest Disregard" of the Law Standard, 27 Ind. L. Rev. 241,  252 (1993); Thomas Oehmke, commercial Arbitration § 4.28, 103 (1987)).  The very scarcity of decisions vacating arbitration awards both supports the conclusion that EVA would be enforceable, and has the ironic effect of leaving somewhat of a void about what precisely does qualify as a "manifest disregard" of the law.

have set aside arbitration awards based on a "manifest disregard" for the law in employment cases.[83] EVA would be unlikely to upset this trend.

Second, at least one court has concluded that parties may choose a standard for decision-making in arbitration that a court might refuse to apply. *Prescott v. Northlake Christian School*[84] recently held that parties were bound by an award based on Biblical principles because they asked the arbitrator to look to the Bible for guidance in rendering a decision.[85] Given the Constitutional commitment to the separation of church and state, if a court is willing to enforce an arbitration award based on the Bible, it should be willing to enforce an arbitration award that is based on the various possible interpretations of the law and the evidence.[86]

Third, EVA does not show a "manifest disregard" for the law, but merely renders a result consistent with its competing plausible interpretations. Its key departure from winner-take-all litigation is in how to respond to uncertainty about what the law means, not to change the legal standard.[87]

Fourth, if courts refused to enforce EVA, common forms of binding arbitration would be in jeopardy. In final-offer arbitration, for example, the arbitrator must choose between the final

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[83] Calvin Sharpe, Integrity Review of Statutory Arbitration Awards, 54 Hastings L.J. 311, 333 & n. 109 (2003) (citing Michael LeRoy and Peter Feuille, Private Justice in the Shadow of Public Courts: The Autonomy of Workplace Arbitration Systems, 17 Ohio St.J. on Disp. Resol. 19, 73-84 (2001).

[84] 244 F.Supp.2d 659 (E.D. La. 2002). The court did this under the Montana Uniform Arbitration Act (MUAA), holding that the MUAA was not preempted by the Federal Arbitration Act, which also applied. Id. at 663-64.

[85] Id. at 667.

[86] It is possible that courts would reach a different conclusion in cases involving statutory or public law. Some recent cases have suggested heightened review, for example, of whether an arbitrator manifestly disregarded the law in employment discrimination cases. See Cole v. Burns International Security Services, 105 F3d 1465, 1487 (D.C. Cir. 1997) (suggesting heightened standard of review of arbitral decisions in public law cases); Halligan v. Piper Jaffray, Inc., 148 F.3d 197, 204 (2d Cir. 1998) (vacating award for employer in discrimination case based on manifest disregard for law). Ware suggests these cases may mark an incremental change in the standard of review of arbitration decisions in some areas of the law. Ware, Default Rules from Mandatory Rules, 83 Minn. L. Rev. at 742-44 & nn. 163-69.

[87] It is worth nothing that the same may not be true of awarding proportionate damages. Doing so in a sense changes the substantive standard that applies to dispute resolution and not just the approach the arbitrator is to take in interpreting competing views of that standard. See supra note _ and accompanying text. Nevertheless, for the reasons set forth in the text, even an arbitration award based on proportionate damages should be enforceable in court.

offers made by each party. These offers are likely to reflect the value of a case based on competing interpretations of the law. The arbitrator's choice between offers, then, is unlikely to be consistent with any one view of the law. If EVA requires vacatur, so should final offer arbitration under these circumstances. The same is true for interest arbitration—it provides a binding resolution of a dispute based on the parties' interests, not based on their legal rights. A general refusal to enforce awards in EVA would seem to require upsetting a significant portion of the prevailing practice in alternative dispute resolution.[88]

Another possible obstacle to enforcement of EVA is that it is "against public policy."[89] This doctrine, however, has not been used to reject creative forms of arbitration, but rather to reverse rare decisions that are in sharp conflict with the purposes of the law. For example, *Delta Airlines, Inc. v. Air Line Pilots Association International*[90] refused to enforce an arbitrator's decision that there was no "just cause" for terminating a pilot who flew while intoxicated. The court noted that it would generally uphold an arbitrator's decision even if it appeared to be "wrong," "unsupported," "poorly reasoned," or "foolish."[91] The court would vacate the award only if there was an explicit, well-defined, and dominant public policy established in the law against allowing an arbitrator to rule that a pilot is authorized to operate an aircraft while

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[88] To some extent, enforceability in court could vary by context. Interest arbitration—which at times takes the form of final-offer arbitration—often has express statutory authorization for labor disputes. See generally See Elissa M. Meth, Final Offer Arbitration: A Model for Dispute Resolution in Domestic and International Disputes, 10 Am. Rev. Int'l Arb. 383, 385 (1999). Still, final offer arbitration has uses far beyond that context. Id. at 384-86.

[89] This grounds has been recognized by at least the Second, Eighth, Ninth, Tenth, Eleventh, and the District of Columbia Crcuits. See Diapulse Corp. of America v. Carba, Ltd., 626 F.2d 1108 (2d Cir. 1980); PaineWebber, Inc. v. Argon, 49 F.3d 347 (8th Cir. 1995); Arizona Electric Power Cooperative, Inc. v. Berkeley, 59 F.3d 988 (9th Cir 1995); Seymour v. Blue Cross/Blue Shield, 988 F.2d 1020 (10th Cir. 1993); Brown v. Rauscher Pierce Refsnes, Inc., 994 F.2d 775 (11th Cir. 1993); Revere Copper & Brass, Inc. v. Overseas Private Investment Corp., 628 F.2d 81 (D.C. Cir.), cert. denied, 446 U.S. 983 (1980).

[90] 861 F.2d 665 (11th Cir. 1989).

[91] Id. at 670.

drunk.[92]  It found that there was.[93]  EVA would not seem to violate any similarly explicit, well-defined, and dominant public policy.

Similarly, some courts refuse to enforce arbitrators' awards if they are "arbitrary and capricious."[94]  EVA, however, uses a clear logic to determine a recovery. As long as an arbitrator does not obviously fail to follow this logic, the award would not be "arbitrary and capricious" and should be enforceable.  So, too, with the refusal of some courts to enforce arbitrators' awards that are "completely irrational."[95]  EVA is rational.[96]

In sum, courts have shown great deference to arbitration.  It is therefore unlikely that they would generally refuse to enforce awards in EVA.  This conclusion also finds support in the acceptance that parties generally may (and should be encouraged to) settle a legal dispute for any amount they choose.[97]  It would seem to follow that they may ask a neutral party to impose a result consistent with the expected value of trial, a plausible candidate for a just settlement.

2.  The Willingness of Providers of ADR Services to be Creative.

Another reason that imposed compromise will work best out of court is that providers of arbitration services, unlike courts, have strongincentive to experiment with proposals like EVA.

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[92] Id. at 671, 674.

[93] Id. at 674.

[94] See, e.g., Lifecare, Inc. v. CD Medical, Inc., 68 F.3d 429, 435 (11th Cir. 1995).

[95] See, e.g., Swift Industries v. Botany Industries, 466 F.2d 1125, 1131 (3d Cir. 1972); French v. Merrill Lynch, Pierce, Fenner & Smith, Inc., 784 F.2d 902, 905-06 (9th Cir. 1986).  It is questionable whether this is in fact a distinct basis for vacating an arbitration award.  It has been invoked so infrequently that it may be best understood as an alternative phrasing of other grounds.  See Hayford, Law in Disarray, 30 Ga. L. Rev. at 788-93.

[96] Finally, courts have sometimes refused to enforce awards based on interpretation of a contract at odds with the "essence" of an agreement between the parties.  See, e.g., Anderman/Smith Operating Co. v. Tennessee Gas Pipeline Co., 918 F.2d 1215 (5th Cir. 1990), cert. denied, 501 U.S. 1206 (1991).  This is to ensure that an arbitrator honors the terms of the contract giving rise to a dispute.  Id. at 1218.  Courts have stated that this standard should be invoked to vacate an arbitration award only if it is in direct conflict with the clear agreement of the parties.  See, e.g., Employers Insurance v. National Union Fire Insurance Co., 933 F.2d 1481, 1486 (9th Cir. 1991); John T. Brady & Co. v. Form-Eze Systems, Inc., 623 F.2d 261, 264 (2d Cir.), cert. denied, 449 U.S. 1062 (1980).  No problem would seem to arise from an arbitrator basing an award on various plausible interpretations of a contract, as would be required by EVA.

[97] See,e.g., Stephen McG. Bundy, The Policy in Favor of Settlement in an Adversary System, 44 Hastings L.J. 1 (1992).

It is the sort of product that can help them to secure business that might otherwise go to competitors.[98] There is even an advantage in EVA to being the first to bring the product to market. After all, experience in EVA is likely to make a particular arbitrator attractive to potential participants. Whoever offers EVA first will have a head start in accumulating experience.

Indeed, the most likely route to judicial acceptance of imposed compromise may be an established record of its success in arbitration. If and when arbitrators gain familiarity with EVA, and acquire the experience to assess its utility, perhaps courts will adopt expected value or some other standard for imposed compromise, at least in limited circumstances.[99] Arbitration can allow for the kind of practical testing that judges may require before they are willing to consider imposing a compromise in their courtrooms.

For these reasons, EVA is a more practical proposal than past academic suggestions regarding imposed compromise by courts. It is therefore worth exploring the potential advantages it offers over existing and proposed forms of dispute resolution.

III.    The Benefits of EVA.

EVA holds potential advantages over trial and traditional binding arbitration, as well as over other forms of imposed compromise. In particular, these benefits include: allowing parties to insist on their legal rights without the risks of winner-take-all litigation, minimizing the size of

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[98] Indeed, courts may have an interest in deflecting, not attracting, business. This is consistent with the judicial embrace of arbitration in the 1980s which arguably was based at least in part on a desire to ease the case load of the federal judiciary. See Richard C. Reuben, Constitutional Gravity: A Unitary Theory of Alternative Dispute Resolution and Public Civil Justice, 47 UCLA L. Rev. 949, 978 (2000).

[99] Note, however, that courts may not be able to impose an expected value outcome, at least not on a regular basis. To do so would result in a form of circularity—a court imposing its prediction of what courts would do, based on their predictions of what courts would do, ad infinitum. This is reminiscent of the problem of circularity that afflicts certain forms of legal positivism. See Joshua P. Davis, Taking Uncertainty Seriously: Revising Injunction Doctrine, 34 Rutgers L.J. 363, 406 & n. 137 (2003) (citing David Luban, Lawyers and Justice: An Ethical Study 22 (1988)).

errors in adjudication, and encouraging desirable expenditures on litigation. Part III explains

why EVA is likely to have these effects.

A.      Vindicating Legal Rights Without the Risks of Trial.

EVA allows parties to avoid the risks of trial while still obtaining a result consistent with

an objective assessment of their legal rights.[100] The outcome of EVA should be the same as they

would fare on average if they tried their case repeatedly in court. As a result, EVA should be

attractive to parties and honor the values embodied in the law.

i.      Risk-Averse Parties Should Choose EVA over Trial.

Litigants should prefer Expected Value Arbitration to trial if they are averse to risk.

Parties are averse to risk if they have concerns that extend beyond the average financial pay-off

of a venture. They also care how speculative a pay-off is and have a preference for certainty.[101]

All else being equal, many people prefer to avoid risk in litigation. [102] EVA allows parties to do

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[100] By "objective" I mean an unbiased party's assessment of the strength of each litigant's legal position based on the law and the evidence.

[101] Economists tend to assume that litigants are averse to risk, see, e.g., Posner, Economic Analysis of Law §1.2, at 12; Abramowicz, 247 & n. 57 (citing Herbert Hovenkamp, Legislation, Well-Being, and Public Choice, 57 U. Chi. L. Rev. 63, 69 n. 21 (1990)), as do more generally proponents of expected utility theory. See generally Chris Guthrie, Better Settle than Sorry: The Regret Aversion Theory, 1999 U. Ill. L. Rev. 43, 50 & n. 37.

[102] Relaxing the assumption of risk aversion would give rise to quite a complex analysis. This is because empirical work has shown that attitudes toward risk vary by context. Empirical work has shown some general trends. People tend to be averse to risk in a couple of situations. They will not risk a small but certain sum for a moderate to good chance at a somewhat larger sum, even if the risk has a higher average pay-off. They also prefer to pay a small but certain sum to avoid the unlikely chance at a catastrophic loss, even if the risk on average would cost less. In addition, people tend to be risk prone (also termed risk seeking) in a couple of scenarios. They will risk a small but certain amount for a very small chance at a large recovery, even if the risk averages a worse result. This explains lotteries. Similarly, they prefer to risk a large and fairly likely loss rather than incur a certain but somewhat smaller loss, even if the average result of the risk is worse than the certain loss. See generally Daniel Kahneman & Amos Tversky, Advances in Prospect Theory: Cumulative Representation of Uncertainty, 5 J. Risk & Uncertainty 297 (1992); Daniel Kahneman & Amos Tversky, Prospect Theory: An Analysis of Decision under Risk, 47 Econometrica 263 (1979); Daniel Kahneman & Amos Tversky, Choices, Value, and Frames, 39 Am. Psychol. 341 (1984). See also Guthrie, Better Settle than Sorry, 1999 U. Ill. L. Rev. at nn. 63-64.

These findings are not easy to apply to litigation. Whether a result counts as a gain or a loss is not self-evident. It depends on framing. A plaintiff, for example, may consider any recovery in litigation to be a gain. Alternatively, she may believe she is entitled to a recovery of a certain amount. Any recovery less than that amount she may consider a loss, rather than a gain. The choice between these perspectives may have a profound effect on her assessment of risk.

so, while still providing a result that, on average, matches what they would get at trial. This option should be attractive to many disputants.

To see the benefits of EVA for the risk averse, take a simple example. How would randomly selected people respond if they were asked whether they would prefer to be guaranteed $6,000,000 or to have a fifty percent chance at $20,000,000? The expected value of a fifty percent chance at $20,000,000 is calculated by multiplying the odds of winning by the amount if the person wins: .50 x $20,000,000 = $10,000,000. Yet $6,000,000 would so fundamentally change the life of most people that the extra $4,000,000 in average expected income is of relatively little consequence, and not nearly worth the rik of receiving nothing at all. T o put the same point more generally, as a person becomes wealthier, each additional dollar tends to have a smaller marginal effect on her quality of life. For this reason, and perhaps others, people often prefer certain gains of smaller amounts to speculative gains of greater amounts.[103]

The same logic can apply to potential losses. In many situations, people prefer to pay a small but certain amount to the risk of losing a far greater amount.[104] Indeed, the insurance industry capitalizes on this preference. Insurance companies must charge more than the average

These complexities for the most part are not relevant to this Article because parties' who choose EVA generally will be averse to risk. That characteristic is more pertinent than the reasons for their risk aversion.

[103] Posner's view is consistent with this analysis. He relies on diminishing marginal utility as an explanation for risk aversion. Posner, Economic Analysis at 12. I do not mean to say this is the only possible explanation for risk aversion and recognize the potential role of psychological considerations in risk aversion. See generally Chris Guthrie, Better Settle than Sorry: The Regret Aversion Theory, 1999 U. Ill. L. Rev. 43, 50 & n. 37 and57 & nn. 63-64 (discussing diminishing marginal utility and prospect theories of risk aversion). Guthrie has offered a new, intriguing take on risk aversion—regret aversion. He suggests that aversion to risk may be motivated in part by aversion to regret and may cause people to choose paths that will help them to avoid discovering if they have selected poorly. Id. at 45-46.

[104] Subscribers to expected utility theory and prospect theory agree that plaintiffs should generally be averse to risk See Chris Guthrie, Better Settle than Sorry: The Regret Aversion Theory, 1999 U. Ill. L. Rev. 43, 50 & n. 37 and57 & nn. 63-64. According to expected utility theory, the reason is that each additional dollar a plaintiff wins is worth decreasing marginal utility. Id. at 50 & n. 37. According to prospect theory, the reason is that most people prefer a small, certain gain to the possibility of a large gain, speculative gain, even if on average they would do better with the large gain. Id. at 55 & n. 54. Prospect theory tends to believe that defendants will frame the outcomes at trial in terms of potential losses and, therefore, will tend to be risk-seeking because many people prefer to risk a large, speculative loss rather than to accept a small, certain loss. Id.

expected loss of the risks they cover. Otherwise, they could not pay their administrative costs, much less make a profit. Yet many people buy insurance because they would rather incur small, regular expenses than risk owing a great deal.

Moreover, litigants are particularly likely to be averse to risk. People are unlikely to satisfy whatever appetite they have for risky ventures by taking chance in litigation. As scholars have suggested, other risky options should be more attractive than trial, likely hang gliding, or mountain climbing, or poker.[105]

In any case, some disputants will beaverse to the risks of trial , and they should be the ones who find EVA attractive. The winner-take-all approach of trial leads to a greater range of possible results and means thatmore rides on chance than in EVA. This role of chance is what risk averse litigants seek to avoid. EVA, on the other hand, averages out the possible results. It should lead to greater predictability and less variation in outcome. At the same time, by definition, EVA and trial aim to produce the same average result. As a result, EVA should be attractive to risk-averse litigants.

ii.      Parties Should at Times Choose EVA over Settlement.

Settlement offers many of the benefits of EVA. Once the parties reach a settlement, they eliminate the risks and costs of litigation.[106] Still, for various reasons even those parties who wish to settle are sometimes unable to do so. Divergent predictions about the outcome of trial, strategic behavior, and the psychological dynamic between disputants may frustrate settlement efforts.[107] Negotiations are particularly likely to fail if each party believes that the other is

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[105] Scholars have noted that even those litigants who have a taste for risk are likely to be able to satisfy it in other contexts. See Abramowicz at 240, n. 37 (citing Richard Craswell, Deterrence and Damages: The Multiplier Principle and Its Alternatives, 97 Mich. L. Rev. 2185, 2230 (1999)).

[106] Of course, the negotiation process is not cost-free. If it fails, it may simply add to the overall cost of litigation.

[107] For a discussion of these considerations see Joshua P. Davis, Toward a Jurisprudence of Trial and Settlement: Allocating Attorney's Fees by Amending Federal Rule of Civil Procedure 68, 48 Ala. L. Rev. 65, 128-32 (1996).

unwilling to agree to a fair settlement.[108] Parties who cannot settle for any of these reasons should find EVA attractive.

a. Divergent Predictions.

A common reason parties cannot settle is that they disagree about the likely outcome of trial.[109] The parties' predictions about trial may differ by more than the anticipated benefits of settlement. If so, to settle, one or both parties would have to accept a result that is less attractive than taking a chance at trial.

The dispute between Penelope and Dwayne can illustrate this point. Assume that Penelope and Dwayne are the only witnesses to the accident between them and that the parties are certain Penelope will recover $100,000 if she wins. Penelope may believe her chances of winning are 80%, for she perceives herself as a far more credible witness than Dwayne. Dwayne may have precisely the opposite view. He may believe he has an 80% chance of winning. Assume that each party expects its costs of litigation to amount to $25,000.

If each party is indifferent to risk, these divergent predictions preclude the possibility of settlement. Penelope believes she has an 80% of recovering $100,000 and a 20% of recovering nothing, and in either case she will lose her costs of $25,000. The expected value to her of litigating through trial is .8 x. $100,000 + .2 x $0 - $25,000 = $55,000. She will settle for no less than $55,000.

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[108] See Russell Korobkin & Chris Guthrie, Psychological Barriers to Litigation Settlement: An Experimental Approach, 93 Mich. L. Rev. 107, 109-10, 142-50 (1994) (moral indignation about issues internal to settlement negotiations can prevent settlement).

[109] This is perhaps the most common explanation among economists for why cases do not settle. See, e.g., Douglas G. Baird, Robert H. Gertner, and Randal C. Picker, Game Theory and the Law 245-47 (1994); Posner, Economic Analysis of Law at 555.

An equivalent analysis for Dwayne is that he has a 20% chance of paying $100,000 and an 80% chance of paying nothing, and his costs are $25,000. The expected value to him of trial is .20 x -$100,000 + .80 x. $0 - $25,000 = -$45,000. He will pay no more than $45,000 to settle.

Given that Penelope will settle for no less than $55,000 and Dwayne for no more than $45,000, settlement is not an option. Of course, if either party is averse to risk, the numbers may move closer together. Still, divergent predictions may prevent settlement.

b. Strategic Behavior.

Even if some overlap would allow the parties to settle, if the range of mutually acceptable resolutions is small, settlement is unlikely.[110] This is in part because of a second potential impediment to settlement—strategic behavior. Under our hypothetical circumstances, Penelope might just barely prefer settlement for $50,000 over trial if she is averse to risk. However, if she is confident in her assessment of the odds at trial, she may believe that Dwayne will not force her to accept that result. After all, from her perspective, if Dwayne pays only $50,000, he is capturing the lion's share of the benefit to both parties from settlement. She may refuse to settle unless she is paid a larger amount than the smallest sum she would in fact prefer to trial. If Dwayne says he would prefer trial to paying what she demands, she may not believe him. A similar set of strategic concerns may motivate Dwayne. In this way, strategic behavior may undermine a possible settlement.

Of course, the likelihood of strategic behavior precluding settlement would decrease if the parties were to reform their predictions about trial. This could emerge from settlement discussions, as the negotiations may encourage a party who has assessed the likely result of trial

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[110] Posner, Economic Analysis of Law, at 555.

inaccurately to correct her error.  But this will not always occur.  Here, too, strategic

considerations pose a problem.

Strategic behavior is particularly likely to prevent a change in predictions if, as often

occurs, Penelope has information that Dwayne does not have and that she is reluctant to

divulge.[111]  Perhaps Dwayne has testified at deposition that the traffic light at issue was the third

of three lights in a row that he was able to cross without stopping.  Each, he claimed, was green

when he arrived.  Penelope may do research and discover that the timing of the lights makes this

impossible.  Either Dwayne's recollection is faulty or he was driving at more than twice the

speed limit.  Penelope may be optimistic about trial based in part on this information.  She may

believe she can undermine his credibility.  This possibility gives rise to a strategic choice.  If she

wants to settle on favorable terms, she should inform Dwayne of the flaw in his position.

Disclosure, however, would provide Dwayne an opportunity to mitigate the damage from his

testimony.  Penelope must make a decision—whether to tell Dwayne about his vulnerability to

improve her position in negotiations or to remain silent and maximize the impact of her evidence

before the finder of fact.  A decision not to disclose to Dwayne would make settlement difficult.

c. Psychological Impediments to Settlement.

Further confounding efforts at settlement are various psychological considerations.  For

example, Penelope may respond to Dwayne's settlement offers by becoming more rather than

less optimistic about trial.  A settlement offer that she would have found acceptable before

entering into negotiations with Dwayne may not remain so once he makes it.  This is a

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[111] Asymmetric information is also generally recognized in the literature as a reason parties may fail to settle.  See
Baird, Game Theory and the Law at 247-48.

phenomenon called "reactive devaluation."[112]  It reflects the tendency of disputants to be

suspicious of any offer made by an opposing party.  If Dwayne makes an offer that Penelope

thought in advance would be fair, Penelope might conclude that she has underestimated the

strength of her case.  She may adjust her expectations and demand more.  This is just one form of

suspicion that may undermine settlement efforts.  More generally, parties may be hampered by

apprehensions about an unfair settlement.  They may in principle desire to settle for a reasonable

amount, but fear being duped.[113]

These impediments to settlement are mutually reinforcing.  Disparate predictions about

trial increase the odds that strategic behavior will impede negotiations and that negotiations will

sow doubts in each party about the other's good faith.

Further, intervention by a third party without authority to bind the disputants may not

suffice to reach a resolution.  A mediator may help to overcome the barriers to settlement.  But a

party eager to get a fair result may not trust a mediator.  Mediators may at times be deceptive,

privileging the successful resolution of a dispute over candor with the parties.[114]  For example,

they may at times skew their appraisals of a case in an attempt to lower the expectations of one

or more litigants.[115]  Parties in mediation are justified in suspecting that they cannot always rely

on a mediator to be candid about the likely result at trial.  And even if a neutral party attempts in

good faith to provide an objective assessment of the expected value of a case, a party who does

not agree may simply reject the result as inaccurate.

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[112] See Richard Birke and Craig R. Fox, Psychological Principles in Negotiating Civil Settlements, 4 Harv.
Negotiation L. Rev. 1, 48-49 & nn. 186-89 (1999).
[113] See Russell Korobkin & Chris Guthrie, Psychological Barriers to Litigation Settlement:  An Experimental
Approach, 93 Mich. L. Rev. 107, 109-10, 142-50 (1994) (moral indignation about issues internal to settlement
negotiations can prevent settlement).
[114] For a candid and entertaining discussion of the deceptive practices of mediators see generally John W. Cooley,
Mediation Magic:  Its Use and Abuse, 29 Loy. U. Chi. L. J. 1 (1997).
[115] See, e.g., Patrick E. Longan, Ethics in Settlement Negotiations:  Foreword, 52 Mercer L. Rev. 807, 835 (2001)
(acknowledging potential temptation of mediator to mislead party about likely outcome of trial to secure settlement).

d.  EVA as a Solution.

EVA offers relief from the challenges to compromise created by divergent expectations, strategic behavior, and psychological barriers to settlement.  It does so by offering, in a sense, an objectively reasonable settlement, one that reflects the average strength of a case in court.

EVA eliminates the problem of divergent predictions.  The arbitrator makes an objective assessment of the likely results at trial.  That assessment is the only one that counts.

EVA also allows the parties to avoid strategic behavior.  The arbitrator will award the expected value at trial.  No wrangling is necessary to determine how to allocate any savings between the parties.  Further, because the result of EVA is final, the parties have incentive to disclose all information favorable to their case.

Further, parties unable to agree on a reasonable settlement may accept that resolving the dispute based on an objective assessment of the expected value of trial is fair.  Each party will do as well as an objective party believes it would have done on average at trial.  Agreement on this standard is a way to get past psychological barriers to resolving the dispute.[116]

iii.  EVA Allows Parties to Insist on their Legal Rights without Facing the Risks of Trial.

EVA, then, is a way for litigants who cannot settle to avoid the risks of trial.  The same can be said of other forms of imposed compromise.  Yet EVA holds a potential advantage over the alternatives because it is respectful of legal rights in ways that other forms of imposed compromise are not.  In particular, EVA allows a party to secure an objective assessment of its right under the law.

a.  EVA Honors Legal Rights in a Way that Other Forms of Imposed Compromise Do Not.

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[116] True, a party may conclude after-the-fact that the arbitrator was incorrect.  Overly optimistic parties may think they will do better in EVA than is realistic, just as they may have inaccurate expectations about trial.  But at some point disputants must cede control—a third party will ultimately resolve the dispute, whether through binding arbitration or trial.  So parties who cannot settle may well accept EVA.

As compromises go, EVA shows particular deference to legal rights. This is so in part because it allows litigants to insist on receiving the benefit of their legal rights, while candidly recognizing that errors are possible in determining those rights. Other forms of compromise do not honor legal rights in the same way.

To see this, note the stark choice litigants currently face without EVA. On one hand, they may resolve their disputes through trial or binding arbitration. These forms of dispute resolution permit litigants to insist on their legal rights. They can put their case before a decision-maker, who is to apply her best understanding of the law to her best understanding of the facts. But, as noted above, these winner-take-all approaches to dispute resolution are risky and many litigants dislike risk.

Alternatively, litigants may choose some other form of dispute resolution. These choices are generally less risky than trial or binding arbitration because they involve some form of compromise. Unlike EVA, however, they allow influences to creep into the dispute resolution process that have little to do with the evidence or the law. Depending on the form of dispute resolution at issue, influences that are likely to inform the result include the strategic behavior of the parties, their interests, their values, and their psychological needs and desires.

I do not mean to claim that formal legal rights are the only source of legitimacy in dispute resolution. Indeed, we may find some additionalinfluences are more suspect than others. In a perfectly just world, skill as a negotiator, for example, might not affect the resolution of a dispute.[117] In contrast, we may be more hesitant to conclude that the values embodied in the law are necessarily preferable to the private values of the parties as a basis for resolving the

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[117] See, e.g., Owen Fiss, Comment, Against Settlement 93 Yale L.J. 1073, 1076 (1984); Edward Cooper, Work Product of the Rulemakers, 53 Minn.L.Rev. 1269-74 (1969).

controversy between them.[118]  Still, trial enables parties to insist that a neutral decision-maker

shall assess the law and the evidence and impose a result accordingly.  For litigants to retain this

right, and yet at the same time obtain a compromise, is a potential benefit of EVA.[119]

In this sense, EVA, like trial, is objective.  It provides an outcome thatembodies  a neutral

assessment of the law and the evidence in a case.  In EVA, as at trial, disputants get the full

benefit of the law, to the extent it can be discerned and applied by fallible human reckoning.

EVA and trial differ only in their approaches to the possibility of error:  EVA reflects all of the

possible conclusions that a court might reach, accepting the inevitability of enduring uncertainty;

at trial, in contrast, a court chooses a single outcome that it believes is correct, although it knows

that it may be mistaken.  Both, however, rely exclusively on the law and the evidence in

rendering judgment.

This is not true of the existing forms of imposed compromise.  To see this, it is

worthwhile to review the forms of imposed compromise that currently exist.

Interest arbitration.  Perhaps the most common form of imposed compromise is interest

arbitration.[120]  It is used frequently in labor disputes, particularly involving public employees

who are forbidden by law to strike.[121]  When a disagreement arises over the terms of

employment of police, for example, rather than risk an impasse that could result in a dangerous

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[118] For a sympathetic discussion of individuals organizing their conduct consistently with private norms and at odds
with formal legal rules see Robert C. Ellickson, Order Without Law:  How Neighbors Settle Disputes (1991).  .
[119] I do not mean to assert that relative resources will not affect the outcome in EVA.  They will, just as they have a
tendency to distort the outcome at trial.  My point is that other forms of dispute resolution may further compound the
influence of relative resources, causing a party who would fare poorly in trial because of limited resources to cede
most of the benefits in, for example, settlement.  In this way, that result may be, in a sense, doubly distorted.  The
expected result of trial, which is often the point of departure for negotiations, may be skewed by a power imbalance
between the parties, and negotiations may further skew settlement in favor of the more powerful party.
[120] See generally Alan S. Rau, Edward F. Sherman, and Scott R. Peppet, Processes of Dispute Resolution:  The Role
of Lawyers 613-20 (3d ed. 2002).
[121] Id. at 614.

strike, an arbitrator may be used to impose a fair result on management and employees.[122]

Interest arbitration, unlike EVA, imposes an outcome that compromises between the interests of the disputing parties rather than imposing an outcome dictated by their legal rights. The parties get some of what they want rather than what the law entitles them to have.[123] Interest arbitration does not reflect application of the law to the evidence. It may produce a result at odds with the parties' legal rights, if they have pertinent legal rights.[124] Interest arbitration therefore does not necessarily reflect an objective view of the parties' legal rights in the same way as trial and EVA.[125]

Final-Offer Arbitration. Another form of dispute resolution that involves an imposed compromise is final-offer arbitration, at times called "baseball arbitration." Each party submits its preferred resolution of a dispute to an arbitrator, who must choose between them.[126] The arbitrator is not permitted to devise her own preferred outcome.[127] Each party has incentive to make concessions, for the arbitrator is to adopt whichever proposal is more reasonable.[128]

This approach is often used in resolving disputes over salaries between baseball players and teams.[129] It can be employed as a substitute for litigation. In such cases, like EVA, the outcome will reflect but not resolve legal and factual uncertainty.

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[122] Id.

[123] Id. at 613.

[124] Interest arbitration most often takes place in a context that would not otherwise result in litigation. When interest arbitration is used, for example, to resolve labor disputes, a collective bargaining agreement may limit the choices for the parties to settling, continuing to negotiate, or resorting to interest arbitration. Id. at 614. Trial is not an option.

[125] Id. at 614-15.

[126] See generally Goldberg, Sander, Rogers and Cole, Dispute Resolution: Negotiation, Mediation, and Other Process 288-89 (4th ed. 2003). Note that final offer arbitration is often used in conjunction with interest arbitration: the arbitrator does not necessarily base a decision on the parties' legal rights, if there are any pertinent legal rights at issue. Id.

[127] Id. at 289.

[128] Id.

[129] Use of final offer arbitration is most common in resolution of labor disputes involving baseball players or unionized public employees, although its potential is far greater. See Elissa M. Meth, Final Offer Arbitration: A Model for Dispute Resolution in Domestic and International Disputes, 10 Am. Rev. Int'l Arb. 383, 384 (1999).

A definite statement of how the arbitrator in fact chooses between the offers would be necessary to determine which possible ingredients of compromise will be reflected in the outcome. Even when a statute prescribes decision-making criteria, however, arbitrators report that they generally do not feel obligated to adhere to them.[130] As a result, there is no reason to assume the arbitrator will adopt any objective measure of the parties' legal rights in choosing between the parties' offers.

In addition, the arbitrator must choose between the parties' proposals. She cannot render her own independent judgment of the right compromise, whatever her standard for identifying that result. And many influences will affect the parties' offers other than their assessments of their respective legal rights. Strategic considerations may inform their offers, as may their interests or psychological needs and desires. In particular, a party without information or resources may cede too much and may fare poorly if her proposal is selected. Or an aggressive party may cede too little to have her proposal chosen, and end up with a worse result than might follow from an objective measure of a fair compromise.[131] Because of these and other possibilities, one would not expect final-offer arbitration to embody solely an objective view of the parties' legal rights.

A Wink and a Nod. An imposed compromise also may occur in arbitration or trial. Many lawyers believe that arbitrators have more of a tendency than judges to "split the difference," a phenomenon perhaps facilitated by the absence of an obligation on the part of

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[130] See, e.g., Meth, Final Offer Arbitration, 10 Am. Rev. Int'l Arb. at 402 & n. 130 (citing James L. Stern & Joyce M. Najita, Lbr. Arb. Under Fire 125 (1997)) (noting study in which 15 of 22 arbitrators stated that statutory criteria had no effect on their decision) but see id. at 404 & n. 141 (citing Paul L. Burgess & Daniel R. Marburger, Do Negotiated and Arbitrated Salaries Differ Under Final-Offer Arbitration?, 46 Ind. and Lab. Rel. Rev. 548, 549 (1993)) (suggesting arbitrators have incentive to adhere to decision criteria outlined by parties).
[131] See Steven J. Brams, D. Marc Kilgour, and Samuel Merrill III, "Arbitration Procedures" in Negotiation Analysis 55-56 (1991) (discussing strategy in formulating offers).

arbitrators to provide an explanation of their reasoning.[132]  Many observers also believe that

juries will at times produce compromised verdicts.[133]  None of this is supposed to occur.  But

when it does, imposed compromise comes with "a wink and nod."

Because this sort of imposed compromise is not officially acknowledged, it is difficult to

characterize.  If arbitrators seek a compromise, will they average what each party is seeking, base

an award on how much they like each party, compromise in light of the strength of each party's

case, or attempt to satisfy the interests of each party or their perceived psychological needs and

desires?  What will shape a jury's compromise verdict, if that is the course it chooses?  In a given

case, it will not generally be possible to answer these questions with confidence.  These vagaries

mean that any implicit compromise that occurs in trial or arbitration is unlikely to be based

exclusively on an objective view of the parties' legal rights.

The following chart reflects the distinctive nature of EVA as imposing ompromise based

on an objective assessment of the parties' legal rights:

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[132] See Ware, Mandatory Rules, 83 Minn. L. Rev. 703, 719-20 & nn. 78-80 (citing Soia Mentshikoff, Commercial Arbitration, 61 Colum. L. Rev. 846, 861 (1961); I Gabriel M Wilner, Domke on Commercial Arbitration 25.01, at 391 (rev. ed. 1995); Dean B. Thomson, Arbitration Theory and Practice:  A Survey of AAA Construction Arbitrators, 23 Hofstra L. Rev. 137, 154-55 (1994); John S. Murray, Alan Scott Rau & Edward F. Sherman, Processes of Dispute Resolution 636 (2d ed. 1996); IV Ian R. Macneil, Richard E. Speidel & Thomas J. Stipanowich,, Federal Arbitration Law 40.5.2.4, at 40:47 (1994); Harry T. Edwards, Arbitration Employment Discrimination Cases:  An Emprical Study, in Proceedings of the Twenty-Eighth ANNUAL MEETING OF THE NATIONAL ACADEMY OF ARBITRATORS 59 (1975); Patricia A. Greenfield, How Do Arbitrators Treat External Law?, 45 Indus. & Lab. Rel. Rev. 683, 688 (1992)) (reviewing empirical literature establishing that as high a rate as 90% of arbitrators deviate from legal rights when they believe justice so requires).
[133] See generally Lars Noah, Civil Jury Nullification, 86 Iowa L. Rev. 1601, 1606-18 (2001) (discussing evidence of compromise verdicts in civil cases as one form of jury nullification, although acknowledging difficulties in determining whether jury compromised in any given case).

|  | **Imposed** | **Voluntary** |
|---|---|---|
| **Compromised** | EVA (objective view of rights)<br><br>Interest Arbitration (interests)<br><br>Baseball Arbitration (various ingredients)<br><br>A Wink and a Nod (mysterious ingredients) | Mediation<br><br>Settlement |
| **Determined** | Trial<br><br>Traditional Binding Arbitration | ? |

Unlike existing forms of imposed compromise, EVA provides a compromise based exclusively on an objective assessment of the law and the evidence. EVA simply avoids choosing one—possibly erroneous—view of ambiguities in the law and the evidence. In this way, EVA is a form of compromise that honors the parties' legal rights.

Finally, it is important to note that use of proportionate damages in arbitration would not allow parties to insist on their legal rights in the same way as EVA. Instead, it would change the parties' legal rights. Whereas EVA embodies all of the possible outcomes in court, proportionate damages impose a compromise that varies from how any court would likely resolve a case and from how courts would do so on average. As a result, some parties may resist arbitration that would award proportionate damages. This would be true in particular of litigants who feel they would do better on average under the ordinary rules of trial. Further, awarding proportionate damages changes the principles the law serves. Its proponents take a particular view of the aims of the law, and make an argument that proportionate damages would serve those aims differently

and more effectively than winner-take-all trial.[134]  They may well be right.  Still, awarding

proportionate damages does not honor the prevailing legal regime in the same way as EVA.

These points can be made more concrete through an analogy.  Toward this end, imagine a

tennis tournament consisting of a series of matches between individuals.  In each match, the first

player to win two sets is the victor.  The winner advances.  The loser is eliminated.  Each time a

player wins a match, she is entitled to a larger prize.  The champion wins the most.

Each match in this tournament is like a trial because it is winner-take-all.  Whether a

player wins in straight sets or loses a single set makes no difference.  All that matters is which

player wins.  Trial takes a similar approach.  If the court determines that the plaintiff probably

should win, she gets her full remedy.  If the court thinks the best view is that she should lose, she

gets nothing.  Any lack of confidence the court has about whether it has decided correctly has no

influence on the amount of the plaintiff's recovery.

EVA is like offering each participant the expected value of her prize money from the

tournament as predicted by an expert.  The expert would calculate the odds of a player winning

each match in light of the different opponents the player will face.  Her recovery would reflect

how she would fare on average.  As part of this process, the expert might ask to see some players

play a few games against each other or to observe how a player is serving.  The expert would

recognize, however, that having two players complete a match would produce only one possible

outcome, not the result that would happen every time those two players compete.

If players are averse to risk and have confidence in the expert, they might well choose to

accept this average recovery.  This would be particularly likely if, say, the field were reduced to

two finalists who would benefit greatly from an average payoff and do not care much for the

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[134] For an effort to provide a systematic analysis of these aims see Abramowicz, A Compromise Approach to Compromise Verdicts, 89 Calif. L. Rev. 231, 264-86 (2001).

marginal benefit of winning the greatest possible amount. After all, only two players need agree to accept an expected value outcome and the players should do as well on average as they would by playing.

Note that awarding prizes based on the expected value of playing retains the same notion of what it means to be the best tennis player: the one most skilled at winning matches. The expected value analysis just eliminates the risk intrinsic in tournament play.

Awarding proportionate damages, in contrast, would be like changing the rules so that the prizes in a tournament are based on the ratio of sets won to sets lost. This is because proportionate damages calibrate a recovery to the likelihood that a plaintiff should win. Doing so is similar to giving some credit to a player who wins a set but loses a match and taking some credit away from a player who wins a match but loses a set. After all, in a sense a player's loss of a set casts some doubt on whether she should have won the match. Maybe she just got lucky.

Focusing on sets, rather than on matches, might well make for a better tennis tournament. Whether it would or would not, however, it would change what it means to be the best player: in the original tournament, the strongest player is the one who wins the most matches, regardless of whether she sometimes loses sets; under the alternative approach, the best player is the one who wins the highest percentage of sets.

As should be clear, the difference between proportionate damages and expected value can be significant. Two points follow. First, one of the parties is likely to fare worse on average under proportionate damages than a winner-take-all result. This is a powerful reason for even a risk averse party to resist proportionate damages, especially if an expected value result is

available as an alternative.[135]  Second, proportionate damages change the nature of legal rights in

a way that awarding the expected value of trial does not.  Proportionate damages alter what it

means to be a prevailing party and, in some instances, who should prevail.  For example, under

proportionate damages, a plaintiff may win a recovery commensurate with the odds a defendant

caused her injury, even though she would have won nothing in a winner-take-all system.  This is

akin to modifying what it means to be the best tennis player in a tournament.  It does not defer to

the prevailing legal regime in the same way as EVA.[136]

     b.       EVA Should Assist Vulnerable Litigants to Pursue their Legal Rights.

The power of EVA to allow parties to secure their legal rights may have its greatest

impact on vulnerable litigants.  Vulnerable members of society lack the resources—money,

connections, or knowledge—necessary to protect themselves.  They suffer frequent violations of

their legal rights precisely because no repercussions will likely follow.  When vulnerable

members of society are victims, they may not know what their rights are or may lack the means

to vindicate them.  Alternatively, when they are accused, they are often unable to defend

themselves properly.[137]

Notable among the challenges vulnerable litigants face is risk aversion.[138]  EVA should

ameliorate their plight because, as discussed above, it decreases the risks of litigation. A

vulnerable plaintiff who is considering filing a lawsuit may dread even a remote possibility of

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[135] Abramowicz acknowledges this issue.  Compromise Verdicts, 89 Calif. L. Rev. at 241-43.  He also points out in response that the benefits of compromise verdicts in the form of risk reduction may be enough to compensate whichever party will fare worse under proportionate damages than they would on average at trial.  Id. at 244-46. This logic works if the only comparison is with trial, but not once one takes into account the possibility of EVA.

[136] None of this is to say that awarding proportionate damages would not be preferable to the current law in some circumstances.  See id. at 237; Levmore, Probabilistic Recoveries, 19 J. Legal Stud. at 721-25.  Indeed, if proportionate damages best serve justice on some or all occasions, the law should change and an arbitrator in EVA should adjust her predictions accordingly.

[137] See generally Hillard M. Sterling and Philip G. Schrag, Default Judgments Against Consumers:  Has the System Failed?, 67 Denv. U. L. Rev. 357 (1990).

[138] Note, Settling for Less:  Applying Law and Economics to Poor People, 107 Harv. L. Rev. 442, 445-49 (1993).

losing outright and owing her attorney's fees and costs. For this reason, a potential plaintiff may not prosecute a case that would lead to a winner-take-allresult or may settle for an amount significantly less than the expected value of trial.[139] EVA, however, may remove any meaningful chance of a net loss, enabling the plaintiff to pursue litigation. Alternatively, a vulnerable defendant may be so averse to an extreme loss that he will agree to pay more than he would lose on average at trial. By eliminating any meaningful possibility ofan anomalously unfavorable result, EVA may allow this defendant to seek an imposed result if a plaintiff is overreaching in settlement negotiations. Because EVA tends to produce more certain recoveries for plaintiffs and less extreme losses for defendants, it should increase the ability of vulnerable members of society to pursue their legal rights.

A tricky issue for this argument is whether powerful parties will be willing to enter into EVA. Litigants with ample resources, too, are apt to be averse to risk. They may be less so than litigants with lesser resources. Nevertheless, even large capital markets do not like uncertainty. As a result, powerful parties are likely to prefer expected value outcomes to winner-take-all trial. For this reason, they are likely to prefer EVA to trial, if those are their only choices.

This qualification, however, is important because EVA and trial are not the only options. Powerful parties may reject EVA precisely because they can use the threat of trial to extract a settlement on favorable terms from vulnerable litigants. The greater tolerance powerful litigants have for the risks and costs of litigation, the greater their strategic advantage in negotiations. Since most cases settle, powerful parties may refuse to enter EVA because it would deprive them of bargaining power.

A second reason powerful parties may insist on trial is to deter future litigation. This is a

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[139] Id. at 446-47.

likely strategy for an entity frequently involved in legal disputes. Common examples include

employers of large numbers of workers, manufacturers of consumer goods, and insurance

companies. Agreeing to Expected Value Arbitration in, for example, a dispute over the alleged

wrongful termination of an employee may encourage later litigation. Other employees may file

suit in the hope that the employer will again agree to enter EVA. Precisely because employees

may prefer EVA to trial, employers may reject it.

Even when powerful parties are averse to risk, then, they may reject EVA because trial is

not their only alternative. Refusing to enter EVA may result in a settlement favorable to a

powerful party or may prevent lawsuits altogether.

On the other hand, where disparities between the parties in terms of their tolerance to the

risks and costs of litigation are small, they are particularly likely to agree on EVA. Moreover,

even where those disparities are large, evidence suggests EVA will be attractive in some

instances. Dynamics somewhat similar to those in EVA occur in traditional binding arbitration.

It, too, is perceived as yielding less extreme results than trial.[140] As a result, it should deprive

powerful parties of bargaining power in negotiations and of a deterrent to potential litigation.

Yet many powerful parties choose to resolve disputes through binding arbitration.[141] Arbitration

clauses are common, for example, in employment and insurance contracts.[142] Perhaps when

powerful parties tally up the advantages and disadvantages, they will also be amenable to EVA

in some cases. Powerful parties in particular may choose EVA in pre-dispute mandatory

arbitration clauses. They may be willing to agree to arbitration in general and thereby protect

themselves from exposure to great losses in a few cases, even if that means empowering

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[140] See footnotes 132.
[141] See Thomas J. Stipanowich, Punitive Damages and the Consumerization of Arbitration, 92 Nw. U. L. Rev. 1, 1-11 (1997).
[142] Id.

individual litigants in large numbers of cases who have relatively small claims. So EVA may help vulnerable litigants to insist on their legal rights and yet still be attractive to powerful litigants.

B.      Minimizing Errors.

Another feature of EVA that is potentially attractive is that it would result in relatively small errors. This claim is most straightforward when it comes to possible errors in interpreting the *evidence*. In this regard, academics and judges have tended to discuss two goals: (1) minimizing expected error costs,[143] or the average difference between the actual and the correct result in litigation; and (2)avoiding the largest errors that a rule for resolving disputes tends to produce in individual cases.[144]

By both measures, EVA performs well. It should generally produce the same expected error costs as trial and lower expected error costs than proportionate damages.[145] Also, EVA should avoid the largest errors that would occur at trial.

Commentators have focused less on errors of *law*.[146] This is true, I believe, for at least two reasons, which are probably related: first, philosophical issues complicate the notion of a correct interpretation of the law[147] and, second, courts do not generally incorporate in their interpretation of the law any consideration of the likelihood of error.[148] Nevertheless, if one posits plausible measures of legal error, EVA performs similarly well.

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[143] See Robert G. Bone, Civil Procedure: The Economics of Civil Procedure 131 (2003).

[144] For a discussion of this issue see Neil Orloff & Jery Stedinger, A Framework for Evaluating the Preponderance-of-the-Evidence Standard, U. Penn. L. Rev. 1159, 1163-68 (1983).

[145] To the extent that Abramowicz and Levmore rely on hybrid approaches that include use of proportionate damages, their approaches should produce higher expected error costs in the ordinary run of cases, although, as Levmore points out, this may not be true in situations that involve recurring wrongs. Saul Levmore, Probabilistic Recoveries, Restitution, and Recurring Wrongs, 19 J. Legal Stud. 691 (1990).

[146] Notable exceptions include John Coons, Approaches to Court Imposed Compromise, 58 Nw. L. Rev. at 764-773 and Abramowicz, Compromise Verdicts, 89 Calif. L. Rev. at 298-312.

[147] For a discussion of legal uncertainty see Joshua P. Davis, Taking Uncertainty Seriously: Revising Injunction Doctrine, 34 Rutgers L.J. 363, 424-26 (2003).

[148] Id. at 424.

i.      EVA Should Result in Relatively Small Errors in Assessing the Evidence.

a.      Minimizing Expected Error Costs in Assessing the Evidence.

Scholars attempting to quantify accuracy in adjudication have taken recourse to expected error costs.  Expected error costs may be defined as the average difference between the actual result and the right result in a case.[149]  Scholars have generally assumed that accuracy is desirable and that small expected error costs are preferable to large expected error costs.

The dispute between Penelope and Dwayne provides a useful illustration of an analysis of expected error costs.  Assume the version of the hypothetical involving Penelope and Dwayne in which Wanda will testify that she believes that Dwayne was at fault.  Recall that the best view of the evidence is that the odds are 70% that Dwayne ran a red light and 30% that Penelope ran a red light.  We assumed that this would translate into a 90% chance that Penelope would win $100,000 at trial.

This information suffices to calculate the expected error costsof  trial.  First, there is a 70% chance that Penelope should prevail.  If she should winthere is a ninety percent chance that the jury will correctly decide in her favor.  No error will when she wins.  There is also a ten percent chance that the jury will err by denying her a recovery.  The size of that error would be $100,000 because Penelope should win that amount but she will recover nothing.  Second, there is a 30% chance that Penelope should lose.  If so, there is a ninety percent chance of the jury erring by awarding her $100,000 when she should not recover at all.  There is also a ten percent chance that the jury will be correct and decide against her.  This combination of odds and errors

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[149] Robert G. Bone, Civil Procedure:  An Economic Analysis of Civil Procedure 131-32 (2003).  I am assuming that the social cost of an error at trial is the difference between the right result and the actual result.  For a similar approach see Richard Posner, An Economic Approach to the Law of Evidence, 51 Stan. L. Rev. 1477 (1999).

can be expressed in the following formula for the expected error costs from trial: .70 x (.90 x $0 + .10 x $100,000) + .30 x (.90 x $100,000 + .10 x $0) = $34,000.

The expected error costs are the same in EVA. An arbitrator in EVA should award the expected value of the case. The expected value of the outcome at trial is calculated by multiplying the odds that Penelope will prevail by the amount she will recover if she does: .90 x $100,000 = $90,000. The expected error costs can then be calculated. First, there is a 70% chance that Penelope should win. If so, Penelope should recover $100,000 but she will recover only $90,000. This will lead to an error of $10,000. Second, there is a 30% chance that Penelope will lose. If so, Penelope should recover nothing but she will receive $90,000. The error costs, then, are $90,000. The formula for the expected error costs is: .70 x ($100,000 - $90,000) + .30 x ($90,000 - $0) = $34,000.

In this instance, the expected error costs from trial and EVA are the same. Indeed, this will always be true, if the arbitrator is accurate in predicting the expected outcome of trial. [150] The reason is that EVA entails an award that on average will be the same as trial. On average, the award in trial and in EVA will vary by the same amount from the correct result.

The standard proposal for imposed compromise—proportionate damages—yields higher expected error costs than trial and EVA. To see this, recall that under proportionate damages the award is the product of the likelihood that the plaintiff is right and the amount she should recover if she is. In this case, Penelope would receive 70% of $100,000, or $70,000.

The expected error costs for proportionate damages are calculated in much the same way as for trial or EVA. First, there is a 70% chance that Penelope should win. If so, Penelope should recover $100,000 but she will recover only $70,000. Second, there is a 30% chance that

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[150] See Appendix I for a formal proof of this proposition. As in the text, my analysis assumes that EVA predicts the average result at trial accurately. I rely on that argument throughout this Article with limited exceptions in Part V.

Penelope will lose. If so, Penelope should recover nothing but she will receive $70,000. The formula for the expected error costs is: .70 x ($100,000 - $70,000) + .30 ($70,000 - $0) = $42,000. This is higher than for trial or EVA. David Kaye has shown that this will generally be true: trial (and, I would add, EVA) will produce lower expected error costs than proportionate damages.[151]

EVA, then, performs as well as trial, and better than proportionate damages, at minimizing the expected error costs from dispute resolution.

b.     Avoiding Large Errors in Assessing the Evidence.

Expected error costs are not the only way to measure the harm from errors caused by a standard for resolving disputes. Another consideration is the size of errors when they occur. Scholars have suggested that a large error is more significant than numerous small errors, even if they result in the same average error.[152]

Support for this view comes from the aversion most people have for risk in litigation. If Penelope will suffer greater harm from losing when she should win than she would from winning a small amount when she should win a large amount, then the average size of the errors does not capture the harm from errors. The same is true for Dwayne if he would prefer a certain but relatively small loss to taking a chance on winning but at a risk of suffering a very large loss. In both instances, a relatively small *average* error may mask the true extent of harm when there is the possibility for a very large error.

Scholars promoting imposed compromise have made this point. They have contended

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[151] David Kaye, The Limits of the Preponderance of the Evidence Standard: Justifiably Naked Statistical Evidence and Multiple Causation, 1982 Am. B. Found. Res. J. 487. Saul Levmore has pointed out that this will not necessarily be true for certain cases involving recurring wrongs. Saul Levmore, Probabilistic Recoveries, Restitution, and Recurring Wrongs, 19 J. Legal Stud. 691, 704-05 (1990). He provides good reason to adopt a proportionate damages approach in some circumstances.

[152] See, e.g., Neil Orloff & Jery Stedinger, A Framework for Evaluating the Preponderance-of-the-Evidence Standard, U. Penn. L. Rev. 1159, 1163-68 (1983).

that imposing proportionate damages may be better than the winner-take-all outcomes of trial, even if proportionate damages produce larger expected error costs.[153] This is in part because the errors from proportionate damages tend not to be as large as the most extreme errors at trial.[154]

From this perspective, EVA offers an attractive combination of characteristics. As noted, EVA produces the same expected error costs as trial and lower expected error costs than proportionate damages. Meanwhile, EVA, like proportionate damages, also tends to eliminate the largest of errors. It produces errors in more situations than trial, but the errors tend to be smaller. So, for example, assume Penelope should recover $100,000 if Dwayne was at fault and nothing if he was not at fault and the odds are 90% that Penelope will win. EVA will award her $90,000. This means that the largest error will be of $90,000, when Penelope should lose. Trial, in contrast, will sometimes award Penelope nothing when she should win and at other times will award her $100,000 when she should lose. The largest error will be of $100,000. EVA, like proportionate damages, errs more often than trial, but not by as large a margin as trial in particular cases.[155]

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[153] See, e.g., Saul Levmore, Probabilistic Recoveries, Restitution, and Recurring Wrongs, 19 J. Legal Stud. 691 (1990); Orloff & Stedinger, Preponderance-of-the-Evidence Standard, U. Penn. L. Rev. at 1163-68.

[154] See, e.g., Orloff & Stedinger, Preponderance-of-the-Evidence Standard, U. Penn. L. Rev. at 1163-68.

[155] A possible qualification of this point is that proportionate damages may tend to yield even smaller errors than EVA in particular cases. Whether this is so depends on the relationship between the likelihood that the plaintiff *should* win and the likelihood that the plaintiff *will* win. A plausible intuition is that in close cases, the two probabilities will be about the same. If the likelihood that a party *should* win hovers around fifty percent, then the odds that a court *will* find in favor of the party may also approximate fifty percent. As the balance of evidence tips in one party's favor, however, the odds of that party prevailing may shift even more quickly. Thus, we said above that if Penelope has a 70% chance of being right, it may be that 90% of juries would find in her favor. For a view along these lines see Compromise Verdicts, 89 Calif. L. Rev. at 241-42. If this relationship generally holds true, which is an empirical question, then the errors may diverge and tend to be smaller in awarding proportionate damages than in awarding the expected value of trial. Indeed, one can make a more formal statement by relying on a measure of error that weighs large errors more heavily than small errors. One such approach seeks to minimize the square of the error in each case. See Orloff & Stedinger, at 1165-68; Saul Levmore, Probabilistic Recoveries, Restitution, and Recurring Wrongs, 19 J. Legal Stud. 691, 704-05 (1990); Abramowicz, 89 Calif. L. Rev. at 247. Using this approach, awarding proportionate damages minimizes the harm from errors in litigation. See Appendix III for a proof of this claim. If assessed accurately by an arbitrator, proportionate damages will produce smaller errors by this measure than EVA.

EVA, then, performs better than trial and similarly to proportionate damages at avoiding the most extreme errors in particular cases.[156]

ii.     EVA May Minimize Errors in Assessing the Law.

Scholars have spent less time discussing imposing compromise based on potential legal errors than on potential factual errors.[157]  This may be because courts acknowledge the possibility of error in finding facts.  The burden of persuasion is premised on the notion that stochastic reckoning is necessary in addressing conflicting evidence.  A jury is not to find the right facts, just the facts that satisfy a specified likelihood of being right.  The same is not true for the law.  Judges do not acknowledge uncertainty about the law in the same way.

The absence of an acknowledgement of legal uncertainty in decision-making may reflect, in part, philosophical doubts about whether there are right answers to contested legal questions.  Facts—at least certain kinds of facts—seem to be objectively right or wrong.  Either the light was red for Dwayne or it was red for Penelope.[158]  When it comes to the law—or to determinations in general that involve value judgments—there is no physical reality to provide

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[156] This analysis does not exhaust the possible understandings of the goal of minimizing legal errors.  Abramowicz points out, as have others before him, that the goal of minimizing errors is merely instrumental, serving as a means to minimize social losses.  See Abramowicz at 248 (citing Steven Shavell, Economic Analysis of Accident Law 117 n. 12 (1987); V.C. Ball, The Moment of Truth:  Probability Theory and Standards of Proof, 14 Vand. L. Rev. 807, 815-16 (1961); David Rosenberg, The Causal Connection, 97 Harv. L. Rev. at 874 n. 98).  Abramowicz notes that a rule that minimizes average errors could result, for example, in a single manufacturer being held liable for all harm from its own and its competitors' products in market share liability.  Id. at 249.  Saul Levmore has similarly identified various classes of cases in which social losses may result from attempting to minimize errors based on the evidence that the parties present.  See Saul Levmore, Probabilistic Recoveries, Restitution, and Recurring Wrongs, 19 J. Legal Stud. 691 (1990).  These include cases in which one of the parties had the opportunity to create evidence that would have prevented factual ambiguity, id. at 694-95, cases in which the same parties are participants in a series of disputes, id. at 697-98, and cases in which plaintiffs or defendants will always lose under a rule that minimizes errors. Id. at 715-21.  The situations discussed by Abramowicz and Levmore, however, are exceptional.  In general, it would seem that minimizing the average error in cases and the size of errors when they occur will tend to minimize social costs.  I therefore focus on these two general measures of error.  Moreover, note that proportionate damages and EVA are not mutually exclusive.  Proportionate damages, much like any other standard, is susceptible to application in EVA.

[157] But see Schwartz and Beckner, Toward a Theory of the "Meritorious Case": Legal Uncertainty as a Social Choice Problem, 6 Geo. Mason L. Rev. 801, 804-05, n. 10 (1998).

[158] See Brian Leiter, Objectivity and the Problems of Jurisprudence, 72 Tex. L. Rev. 187, 195 (1993) (citations omitted) (reviewing Kent Greenawalt, Law and Objectivity (1992)).

an obvious independent grounding for the notions of correct and incorrect.[159]

Still, we ask judges to do their best to decide legal questions properly. To do that, they exercise their best judgment in interpreting the law, using whatever method of interpretation they believe most defensible. The same faculty that allows for a choice among competing interpretations of the law should allow for an assessment of the odds that an interpretation may be incorrect.[160]

Assuming we accept this understanding of errors in interpreting the law for the purpose of comparing different standards for resolving disputes, the issuethen becomes how to measure the likelihood of legal errors. One straightforward way would be to use the same approach as with the possibility of errors in assessing the evidence. We might distinguish the odds that a party *should* win on a legal issue from the odds that a party *will* win. A form of proportionate damages could award a recovery to the plaintiff according to the chances she should win, whereas EVA would award a recovery in proportion to the odds that she will win at trial. The analysis of legal errors would then be much the same as for errors in finding the facts. Trial and EVA would result in the same expected error costs in interpreting the law,[161] which would be lower than the expected error costs for proportionate damages.[162] EVA and proportionate damages would tend to avoid the largest errors at trial.[163] EVA fares quite well.

An alternative would be to treat the likelihood a plaintiff *will* win on a legal issue as the same as the likelihood that the plaintiff *should* win on the legal issue. A possible justification for this approach would be that consensus is the best measure of what is right when it comes to

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[159] Id. at 195 & n. 31.
[160] For an elaboration of this argument see Joshua P. Davis, Taking Uncertainty Seriously: Revising Injunction Doctrine, 34 Rutgers L.J. 363, 424-26 (2003).
[161] See Appendix I for the formal proof.
[162] See David Kaye, The Limits of the Preponderance of the Evidence Standard: Justifiably Naked Statistical Evidence and Multiple Causation, 1982 Am. B. Found. Res. J. 487.
[163] See supra notes 148-50 and accompanying text.

contested legal issues.[164]  In other words, the stronger the consensus there is behind a result, the greater its likelihood of being correct.[165]

Whatever the rationale, this approach suggests a somewhat different analysis of legal error.  The distinction between EVA and proportionate damages collapses.  The only contrast is with trial.  It turns out that EVA and trialhave the same expected error costs, [166] while EVA (and proportionate damages) will tend to avoid the most extreme errors of trial in individual cases.

Again, an illustration is useful.  In the case of Penelope and Dwayne, a knotty legal issue might determine liability.  Penelope's only significant injury may be the increased probability of suffering some disease in the future—perhaps she crashed into a toxic container and was exposed to a substance that may cause her to develop cancer some day.  Assume the legal controversy is about whether she may recover now for the pain and suffering from fear of the possibility of cancer in her future. [167]  Let's say that the odds are 60% that she will, and therefore should, win on this legal issue and recover $100,000.  In other words, we assume a sixty percent chance of a ruling in the plaintiff's favor translates into a sixty percent chance that she is right.

One issueis  which standard for decision-making produces lower expected error costs. The expected error costs that follow from imposing expected value and all-or-nothing outcomes are the same.  To see this, consider the example of Penelope and Dwayne.  At trial Penelope will win $100,000 sixty percent of the time and nothing forty percent of the time.  There is a sixty percent chance that Penelope winning is the right result and a forty percent chance that it is the

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[164] This is consistent with Abramowicz' working definition of the right result on a legal issue in Michael Abramowicz, En Banc Revisited, 100 Colum. L. Rev. 1600, 1602 (2000).

[165] See Brian Leiter, Objectivity and the Problems of Jurisprudence, 72 Tex. L. Rev. 187, 192 (1993) (citations omitted) (reviewing Kent Greenawalt, Law and Objectivity (1992)) (discussing minimal objectivism).

[166] For a proof of this claim see Appendix II.

[167] See Norfolk & Western Ry. v. Ayers, __ U.S. __, 123 S.Ct. 1210 (2003) (allowing recovery in these circumstances).

wrong result. The expected error costs are captured in the following formula: .60 x (.40 x.

$100,000) + .40 x (.60 x. $100,000) = $48,000.

Under EVA, Penelope will recover $60,000. If Penelope should win, she should recover

the full $100,000. There is a sixty percent chance, then, that her recovery will be too little by

$40,000. If she should lose, on the other hand, she should receive nothing. There is a forty

percent chance, then, that her recovery will be too much by $60,000. The overall error is

$40,000 x .6 + $60,000 x .4, or $48,000. The expected error is the same in EVA as at trial.

This relationship holds true generally. EVA and trial produce the same expected error

costs if the odds of a plaintiff winning on a legal question are the same as the odds of the plaintiff

being right.[168]

A second issueis whether EVA or trial will produce the largest errors. As noted above,

EVA tends to split the difference, if you will, so that neither party gains the full benefit of a

favorable interpretation of the law but when errors occur, they are only a portion of the full

measure of the plaintiffs' potential recovery. As with errors regarding the facts, legal errors will

not be as large in EVA as the most extreme errors at trial.

iii.     Minimizing Adjudicative Errors Should Promote Efficiency.

One way to understand the goal of minimizing errors is through the prism of law and

economics. Economists recognize that any form of dispute resolution will at times be inaccurate.

Inaccuracies can result in inefficiencies. In particular, if the rules in a legal system are designed

to encourage efficient conduct when applied properly, then some parties predicting possible

errors in adjudication will have incentive to engage in inefficient conduct or not to engage in

efficient conduct.

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[168] See Appendix II for the proof.

Of course, legal rules can be developed with the prospect of errors in mind.  No doubt

this sometimes occurs.  But an economic analysis of the law becomes impractical without the use

of simplifying assumptions.  One very common simplifying assumption is that legal rules should

be designed to encourage efficient conduct if courts interpret the law properly and apply it to the

actual facts of a case. [169]  Procedural rules then can be formulated with an eye to minimizing the

distortion created by errors in the adjudicatory process.  Economists generally follow this

approach.  Indeed, if legal rules were perfectly formulated taking into account the possibility of

errors, any proposals for improving accuracy in adjudication would have to be rejected as

disruptive of the perfectly efficient incentives in place.  Economists have not generally adopted

this odd position. [170]

This understanding of the rationale from law and economics for minimizing errors

suggests how those errors should be defined.  The goal of the law is to encourage efficient

behavior when it is applied to the actual behavior of the parties.  A mischaracterization of the

parties' behavior—or, to be more precise, the anticipated possibility of a mischaracterization of

that behavior—will create undesirable incentives.  Errors of fact occur, then, when the court's

findings are inconsistent with what actually occurred.  Similarly, an interpretation of the law is

correct if it will create incentives for efficient conduct.  Errors of law occur when judges deviate

from this goal.  Finally, mixed questions of fact and law, or factual issues that entail value

judgments, like whether a person acted negligently,[171] hold the potential for both kinds of error.

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[169] Richard Posner's work is typical, identifying accuracy in adjudication as one of the aims of the design of the rules governing litigation.  See Posner, Economic Analysis of Law, § 21.2, at 549, 550 n.2; Richard A. Posner, An Economic Approach to the Law of Evidence, 51 Stan. L. rev. 1477, 1480-87 (1999).
[170] Id.
[171] See generally Evan Tsen Lee, Principled Decision Making and the Proper Role of Federal Appellate Courts:  The Mixed Questions Conflict, 64 S.Cal. L. Rev. 235 (1991).

With these definitions in place, it makes sense that a primary focus of economists has

been to minimize the average size of the errors adjudication will produce. In this regard, EVA

performs quite well. As noted above, EVA should produce the same average errors as trial. It

also should produce smaller errors on average than proportionate damages, the most prevalent

proposal from imposing compromise.

Economists have also been concerned at times with the largest errors that adjudication

will produce. The size of errors may matter because large errors are particularly likely to

influence the behavior of disputants who are averse to risk. Large potential errors are likely to

have a particularly significant distorting effect on the behavior of risk averse disputants.[172] As a

result, an economist is likely to prefer the relatively small errors that EVA produces to the larger,

if less frequent, errors that occur at trial.

C.      Encouraging Desirable Expenditures on Litigation.

Another potentially attractive feature of EVA is that it creates desirable incentives to

invest in litigation. Of course, this tends to be true of all arbitration. A common reason for

parties to arbitrate is to reduce litigation costs. And EVA, like other forms of arbitration, can be

less formal than litigation leading up to trial and, therefore, may be less expensive than trial.

But the incentives EVA creates for expenditures on litigation are attractive in another

way. In contrast to trial and winner-take-all arbitration, EVA will encourage risk-averse parties

to invest in litigation[173] if and only if doing so will provide them a net gain on average.[174] One

would expect these incentives generally to obtain in EVA, because EVA should be attractive

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[172] This is consistent with Steven Shavell's point that the concern of economists should not be minimizing errors as
an end in itself, but as a means to avoid discouraging efficient behavior or encouraging efficient behavior. See
Steven Shavell, Uncertainty over Causation and the Determination of Civil Liability, 28 J.L. & Econ. 587, 605-06 &
n. 28 (1985).
[173] I use the term litigation here to include the process leading up to a decision in EVA and other forms of
arbitration.
[174] For a formal proof of this claim, with some limiting assumptions, see Appendix IV.

primarily to risk-averse litigants. Disputants who seek risk should prefer trial or winner-take-all arbitration to EVA.[175]

Assuming disputants are averse to risk, EVA should have two different effects depending on the circumstances of the litigants. First, some parties will have incentive in trial to make expenditures that will yield a net loss on average in dollars. They will do so to avoid the risk of an extremely unfavorable result. They will not have incentive to make these expenditures in EVA. For these disputants, EVA should be less costly than trial.

At other times, parties will be unwilling to make investments in litigation leading to trial even though doing so would benefit them on average. The reason is that they are particularly averse to adding to the harm they will suffer from an exceptionally bad result at trial. EVA spares parties with reasonably strong legal positions from the daunting risk that the costs they incur will exacerbate an extremely unfavorable result. By minimizing this risk, EVA creates incentives for parties to make investments that produce a net gain on average in dollars It also should help plaintiffs to file meritorious cases that risk aversion would prevent them from bringing if trial would determine their recovery.

i.      Some Parties Should Spend Less in EVA than Trial.

Some parties should spend less in EVA than trial. The intuition behind this claim is simple. Parties who are averse to risk tend to avoid the possibility of an exceptionally bad result. At times, they will invest to protect against that risk, even if on average doing so will produce a net loss. This resembles purchasing insurance.[176]

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[175] A possible exception would be parties who agree to EVA through a pre-dispute mandatory arbitration clause. I do not explore the incentives to invest in litigation if a party in EVA is risk-seeking.
[176] The analogy to insurance is not perfect. A standard model for insurance involves a relatively small but certain loss, and protects against a large loss that is unlikely. Investing in litigation, in contrast, does not guarantee that a large loss will not occur, but rather decreases its likelihood. Moreover, unlike insurance, an investment in litigation

Trial tends to produce polar results. A party is likely to win everything or nothing.[177]

Any marginal expenditure may cause a swing from one extreme result to another. Under these circumstances, a party may expend money to protect against an unfavorable swing in result, even if the expenditure will result in a net loss on average.

EVA, in contrast, produces a continuum of results. With EVA, expenditures in litigation will have only an incremental effect one way or the other on the plaintiff's recovery.[178] To a risk averse party, a small improvement in the prospect of avoiding an extremely unfavorable result may be worth more than a great likelihood of improving the outcome by a small amount, even if the two correlate to precisely the same change in expected value in dollars As a result, some risk averse parties will spend less in Expected Value Arbitration than trial.[179]

a. An Example of a Party Spending Less in EVA than Trial.

Once again, the dispute between Penelope and Dwayne provides a useful example.

Assume Dwayne acknowledges that he ran the red light. Fault is not at issue. The source of

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will increase the size of the large loss if it transpires, even if only by a relatively small amount. As a result, in some circumstances, risk aversion could provide a defendant a reason *not* to invest in litigation.

    Take a somewhat fanciful example, although one with a real point behind it. Bill Gates might have $100,005,000,000. In litigation, he might be exposed to a loss of up to $100,000,000,000. Litigation of this magnitude could easily cost millions of dollars. Yet this might be money he would be reluctant to spend because if trial yields a loss of $100,000,000,000, every dollar beyond that will be dear to him. I am grateful to Morton Davis for this example. It supports the general idea that, under some circumstances, risk aversion could lead a defendant to spend less in litigation leading to trial than in EVA.

[177] Of course, this is not always so. Comparative negligence, as opposed to contributory negligence, is apt to produce results along a continuum in a manner similar to EVA. The argument in the text about EVA therefore has important implications for choosing between the rules of comparative and contributory negligence in tort.

[178] Note that the variation in the incentives to spend should not be the result of any difference in the plaintiff's average recovery. By definition, Expected Value Arbitration seeks to award the average recovery in trial.

[179] Winner-take-all trial will not necessarily involve polar results. In this sense, the term may at times be a misnomer. It is winner-take-all because the decision-maker is to resolve uncertainty. In some instances, however, the results of trial may fall along a continuum. A notable example is comparative liability. Under that doctrine, the finder of fact is supposed to decide how much fault should be assigned to a plaintiff and a defendant. See Black's Law Dictionary 282 (6th ed. 1991). Fault is treated as a matter of degree. Much like in EVA, a little more evidence or a slightly more compelling closing argument is likely to have only an incremental effect on the plaintiff's recovery. Whenever the outcomes of trial are continuous in this way, the expenditure on litigation by risk averse litigants will be different from when the results are polar. Courts and scholars have not explored this justification for the shift from contributory negligence to comparative negligence.

contention is the issue of damages. Assume Penelope's only significant injury after the accident is a balance disorder. It is debilitating. She claims a causal link to her collision with the telephone pole. Further assume that Penelope has a 20 % chance of prevailing on causation and recovering $400,000, for an expected value of $80,000.

If Dwayne is risk neutral, he will be indifferent between an expected value award of $80,000 and taking a chance on resolution of the issue at trial. This indifference would translate into similar expenditures in preparing for trial and for EVA.

To see this, assume that the parties have done most of the legal and factual work to go to trial when a new study is released that bears on the crucial issue of causation. The study may shed some light on the etiology of balance disorders, allowing for an assessment of whether the car accident caused Penelope's difficulties. Each party must decide whether to pay for an expert analysis of the new study.

To keep the example simple, assume that Dwayne has only two viable options: to ignore the new study and pay litigation expenses of $25,000 through trial or to secure an expert analysis of the study for an additional $25,000, which will bring his total expenses to $50,000. These choices correlate to different likelihoods of prevailing. Dwayne may conclude, for example, that spending $25,000 on the analysis decreases the likelihood of Penelope recovering by five percent. In other words, Dwayne must choose whether to pay for the additional report and decrease the odds of Penelope's success from twenty to fifteen percent. Further assume that Dwayne's decision is unaffected by whether Penelope will invest in a similar expert analysis.[180]

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[180] This is an important limitation. Interactions between how the parties spend can have profound effects and are not easy to model. Dwayne should, of course, consider Penelope's likely investment strategy in formulating his own. Doing so would require him to evaluate whether the marginal gain from his own investment will vary depending on how much she invests. Thus, whether Dwayne's predictions and assessments of Penelope's investment in litigation should affect his own will depend in part on the circumstances. Exploring this issue is beyond this scope of this Article.

If Dwayne is risk neutral, he will not pay for the expert analysis whether preparing for trial or EVA. The benefit of the expert analysis would be to decrease by five percent the chance that Penelope will recover $400,000. The expected value of the investment is worth five percent of $400,000, or .05 x $400,000 = $20,000, an amount that is less than the cost of the analysis. This means that in trial, Dwayne would be paying $25,000 for a decrease in his liability worth on average $20,000, and in Expected Value Arbitration, Dwayne would be paying $25,000 for a loss that is $20,000 less than would otherwise result. The investment is not economical.

Matters are quite different if Dwayne is averse to risk. If he is, he may be highly motivated to minimize the risk of losing a large sum. Dwayne may, for example, be uninsured. His assets and income may permit him to pay up to, say, $160,000, but beyond that amount a loss would affect him significantly. He might have difficulty paying his mortgage or rent. For this reason, he might well pay $25,000 for the expert analysis in preparation for trial. He cannot afford to take a chance that he will lose $400,000. In a sense, the expert analysis for him is like insurance. He is willing to spend more than his expected return to decrease the odds of a catastrophic loss.

In EVA, in contrast, he might conclude that the difference in the outcome would vary along a continuum. Given the odds, he would anticipate an award around $80,000. He might not suffer terribly if it increased by ten or twenty thousand dollars. Moreover, paying for the expert analysis should result in a net loss on average and may not make the outcome of EVA any more predictable. In this case, Dwayne should refrain from spending money on the expert analysis if, on average, it would cost more than it is worth. EVA protects Dwayne from the kind of dire consequences that would warrant insurance.

b.        Utility Curves and a More Formal Analysis.

In providing a somewhat more formal analysis of the idea that parties at times should expend less in EVA than trial, a useful concept is the utility curve. Utility curves are a way of describing a person's preferences in light of her attitude toward risk. They allow a more systematic expression of why risk averse defendants may spend less in litigating to continuous results than to discontinuous results.

This point is important in that it reveals a potential virtue of EVA. It also has broader implications, providing what may be an as-of-yet unexplored benefit of adopting legal rules that produce continuous results rather than discontinuous and polar results: all else remaining constant, legal rules that produce continuous results may discourage investments in litigation that yields a net loss on average in dollars. This could help to support the shift, for example, to comparative liability from contributory negligence, which many jurisdictions have now undertaken.[181]

Utility is a mythical creature. It relies on a few basic assumptions about people's preferences, assumptions that are quite plausible and yet, as empirical work has shown, that are untrue in many circumstances.[182] Nevertheless, used with caution the concept of utility can cast some light on how people are likely to behave.

Utility is a way of defining a person's relative preferences in numerical terms. Each state of affairs can be assigned a certain number of "utils," which one might interpret as meaning that a state of affairs brings that person a certain amount of satisfaction or pleasure or allows that person to avoid a certain amount of dissatisfaction or displeasure. Assigning two different states

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[181] See Lisa R. Smith, A Dollars and Sense Approach to Partial Settlements: Judicial Application of the Gross Damages Method, 72 Iowa L. Rev. 1147, 1147 & n. 3 (1987) (reporting that by 1987 a majority of jurisdictions had adopted some form of comparative negligence).

[182] For example, utility theory cannot account for framing—a phenomenon, confirmed by empirical studies, in which people's attitudes regarding risk will vary depending on whether they perceive a change in their financial situation as a gain or a loss. See Chris Guthrie, Better Settle than Sorry: The Regret Aversion Theory, 1999 U. Ill. L. Rev. 43, 57 & nn. 63-64 (discussing prospect theory of risk aversion).

of affairs the same number of utils is a way of saying that a person is indifferent between them. Moreover, one may assume that a person's preferences are transitive, that is, if the person prefers state of affairs A to B, and state of affairs B to C, the person should prefer state of affairs A to C. Finally, Von Neumann has shown, given these and a few other plausible assumptions, that a person will value equally a chance of benefiting by a certain number of utils and the guarantee of receiving the expected value of that chance measured in utils. In other words, the person will be indifferent between a fifty percent chance of benefiting by 50 utils and a guarantee of benefiting by 25 utils.[183]

One way to depict utility is through a graph of a utility function. A utility function is a formula that compares the utility of different states of affairs. A useful function correlates a party's utils to having various sums of money.

For the risk-neutral party, who values each dollar equally, a simple utility curve can be constructed. It is linear. It can be expressed by setting one dollar equal to a set numbers of utils. Each additional dollar that a plaintiff expects to receive or a defendant to pay will change the party's well-being equally. The following graph depicts the preferences of a risk-neutral defendant.

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[183] For a general discussion of this understanding of utility see Morton D. Davis, Game Theory: A Nontechnical Introduction 62-65 (1970).

- $s

utils
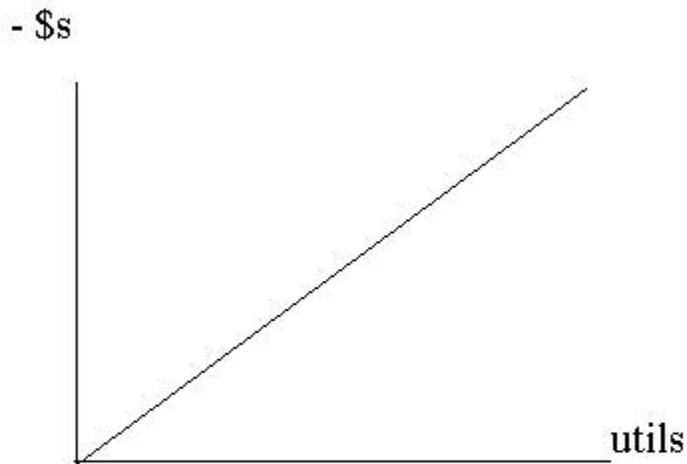
The hypothetical utility curve of Dwayne allows for another illustration of these points. Consider a plausible description of Dwayne's preferences. His utility for the different possible outcomes might be as follows: if he loses an amount up to $160,000, dollars may correlate with utils; if he loses between $160,000 and $250,000, each marginal dollar may be worth two utils; if he loses more than $250,000, each dollar may be worth three utils. These preferences are captured by the following graph:
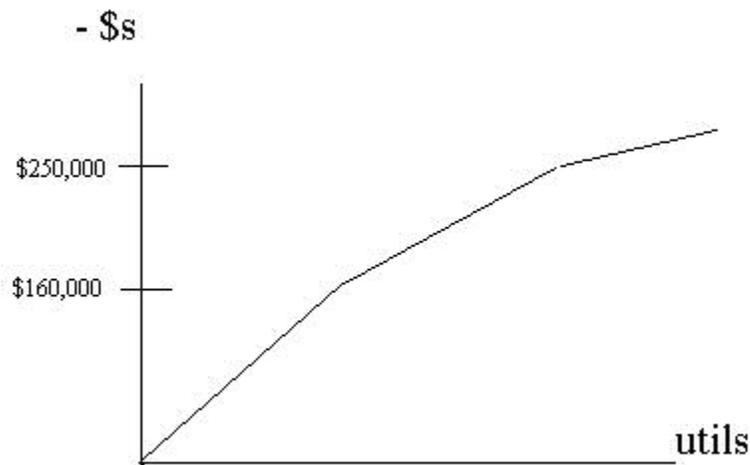
This description permits a more precise analysis of Dwayne's options. At trial, without

an expert analysis, he has an 80 % chance of winning. He expects to pay $25,000 to complete

the trial. If he wins, he will have expended $25,000, but he will owe Penelope nothing. By

hypothesis, this correlates to negative 25,000 utils. If he loses, he will be liable for $400,000,

plus he will have paid litigation costs of $25,000, for a net loss of $425,000. This would

correlate to a loss of one util per dollar for the first $160,000, two utils per dollar between

$160,000 and $250,000, and three utils per dollar over $250,000, or 1 x 160,000 + 2 x 90,000 + 3

x 175,000 = - 865,000 utils. The value in utils of these odds and outcomes is .80 x -25,000 + .20

x -865,000 = - 193,000 utils.

In contrast, if Dwayne pays for the expert analysis, he has an 85% chance of winning. If

he wins, the litigation will cost him $50,000 leaving him with a loss of negative 50,000 utils. If

he loses, he will pay $400,000, plus $50,000, for a total of $450,000. The loss will be 1 x

160,000 + 2 x 90,000 + 3 x 200,000 = - 940,000 utils. These possibilities yield him utils of .85 x

-50,000 + .15 x -940,000 = -183,500 utils.

Dwayne will expect to lose 193,000 utils without the expert's analysis and 183,500 utils

with the analysis. Dwayne will pay for the analysis, even though it costs more than it is worth in terms of its average return in dollars.

The result is different in EVA. Without the analysis, Dwayne expects to pay $25,000 in litigation. He anticipates that the arbitrator will award approximately $80,000, based on a twenty percent chance that Penelope will win and an expected award of $400,000. His expected loss is $105,000. This is a loss of 105,000 utils. With the analysis, Dwayne expects to pay $50,000 in litigation. He expects the arbitrator to award approximately $60,000, based on a fifteen percent chance that Penelope will win an award of $400,000. His expected loss is $110,000, or 110,000 utils. He will prefer not to pay for the report. (Note also that Dwayne fares better in EVA than at trial whether he pays for the expert report or not—as measured in the example, in EVA he will lose, respectively, 110,000 or 105,000 utils rather than 183,500 or 193,00 utils.)

The key point about Dwayne's preferences is that they vary over a range, where dollars become of marginally greater value to Dwayne the more he loses. EVA converts litigation that would produce discontinuous and polar results into litigation that will produce continuous results, so that marginal changes in expected value, and therefore outcome, are of the same value in utils as marginal investments in litigation. A finder of fact at trial, as in the example of Penelope and Dwayne, may have to decide an issue that permits only one of two outcomes: the plaintiff will recover nothing or a large sum. Additional expenditures in traditional litigation may have incremental effects on the likelihood of a recovery, but the outcome will remain binary.

In contrast, incremental changes in the *odds* of a plaintiff winning in court correlate to incremental changes in the *amount* of the award to the plaintiff in EVA. A discontinuous function that describes the possible outcomes at trial becomes a continuous function that

describes the possible outcomes in EVA.  Each marginal dollar gained or lost falls in the same range of a party's utility curve as dollars spent on litigation.  As a result, risk averse parties will not make investments in EVA that yield a net loss on average in dollars and that they would make in trial. Thus, the transformation from discontinuous to continuous results will in some circumstances reduce the costs of litigation.[184]

ii.        In Trial, as Opposed to EVA, Risk Averse Parties Will at Times Fail to Make

Investments in Litigation that on Average Would Produce a Net Gain in Dollars.

In trial, as opposed to EVA, risk averse parties at times will fail to make investments in litigation that on average would produce a net gain in dollars  The reason is that they  may most wish to avoid compounding the worst possible result at trial by incurring additional costs.  By eliminating this risk, EVA will encourage parties to make these investments.

Parties will at times have to decide whether to make expendituresthat will exacerbate the worst possible result at trial, but that may increase the likelihood that they will win.  At times, risk averse parties will prefer not to take this chance.  Plaintiffs or defendants may forego expenditures on litigation that would on average yield a net gain in dollars, and plaintiffs may choose not to sue even if on average they would benefit by doing so.  An apt analogy is poker. These risk averse parties are like players who will bet only when they are all but certain to win a hand or, for some plaintiffs in these circumstances, like people who refuse to play poker at all.

EVA, in contrast, removes the worst possible result of trial from the realm of possibilities.  An improvement in the strength of a party's case will have an incremental effect on outcome at trial, just as will litigation costs.  One will be traded against the other.  Given that expenditures and improved prospects at trial have the same kind of marginal effect on the

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[184] A proof that risk-averse parties will invest in litigation in EVA if and only if doing so yields a net benefit on average in dollars is in Appendix IV.  It makes some plausible simplifying assumptions.

ultimate result, parties will make expenditures that they expectto produce a net gain in dollars.

a.      An Example of a Party Making an Investment in EVA that it Would Not Risk Making at Trial.

Again, the hypothetical involving Penelope and Dwayne is useful. Imagine that Penelope has a twenty percent chance of recovering $400,000 from Dwayne if she does not hire an expert witness to explain how the car accident may have caused her loss of balance. On the other hand, she has a twenty-five percent chance of recovering $400,000 if she does hire the expert. Assume that the expert would cost $10,000, in addition to the $40,000 she will otherwise spend on litigation. Without the expert, the expected value of trial is ($400,000 x .20) - $40,000 = $40,000.

The $10,000 investment on average is worthwhile. It would increase her average return from .20 x. $400,000 to .25 x $400,000, or from $80,000 to $100,000. Her net expected gain is $100,000 - $80,000 = $20,000, which is larger than the cost of $10,000.

Penelope, however, may be in a financially difficult position. Perhaps she can just make her car payments, pay her rent and put food on the table. Any loss would force her to relinquish her car, which she needs for work. Assuming she cannot find a contingency fee lawyer to take her case, she probably cannot afford to sue.[185] If she does have just enough money to litigate, she may well not be able to afford an expert witness. She may simply lack the capital to make an investment in litigation, even if it is likely to be profitable on average.[186]

Under these circumstances, EVA may improve her ability to invest in litigation. She may be confident that the expected value of the case is large enough to pay her costs and attorney's

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[185] This possibility is quite real. Lewis Maltby reports, for example, that a survey of plaintiffs' attorneys conducted in 1995 revealed that they would not take a case on behalf of an employee with less than $60,000 in provable damages, exclusive of pain and suffering and punitive damages. See Lewis Maltby, Private Justice: Employment Arbitration and Civil Rights, 30 Colum. Hum. Rts. L. Rev. 29 n. 87 (1998).

[186] Note, Settling for Less: Applying Law and Economics to Poor People, 107 Harv. L. Rev. 442, 449 (1993).

fees, even if she would stand some chance of losing at trial. EVA would then allow her to bring an action which she otherwise could not bring or to expend an amount in support of her case that she otherwise could not afford to invest.

b. Utility Curves and a More Formal Analysis.

Again, a utility curve allows a more formal statement of this proposition. Assume that for Penelope each dollar of loss greater than $30,000 is worth four utils, each dollar of loss up to $30,000 is worth two utils, and each dollar of gain is worth one util.

If Penelope expects to go to trial, she will not pay for the expert. With the expert she has a 25% chance of winning $350,000 ($400,000 less her costs of $50,000) and a 75% chance of losing her costs of $50,000. Converting these odds and outcomes into utils: .25 x 350,000 utils - .75 x (30,000 x 2 + 20,000 x 4) = 87,500 – 105,000 = -17,500 utils. Without the expert she has a 20% chance of winning $360,000 and an 80% chance of losing $40,000. This equates to: .20 x 360,000 utils – .80 x (30,000 x 2 + 10,000 x 4) = 72,000 – 80,000 = -8,000 utils. She does better not to invest in the expert.

Moreover, note that she should not initiate litigation at all if she expects to go to trial. After all, even without the expert report she loses 8,000 utils. This is worse than if she did not sue, which would leave her at 0 utils. In other words, she would decline to invest in litigation that would yield a net gain on average in dollars.[187]

In contrast, Penelope will pay for the expert in EVA. She also will have incentive to protect her legal rights through litigation. Her recovery in EVA without the expert will be .20 x $400,000, or $80,000, less her costs of $40,000, or $40,000. This is equal to 40,000 utils. With

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[187] I recognize that she might bring a lawsuit in the hope that Dwayne will settle. See David Rosenberg & Steven Shavell, A Model in Which Suits Are Brought for their Nuisance Value, 5 Int'l Rev. L. & Econ. 3 (1985); Robert G. Bone, Civil Procedure: The Economics of Civil Procedure 45-50 (2003). Still, all else being equal, she is less likely to sue where trial would be a losing proposition than where it would be a winning proposition. In any case, this layer of strategic complexity is beyond the scope of this Article.

the expert her recovery will be .25 x $400,000, or $100,000, less her costs of $50,000, or

$50,000. This is equal to 50,000 utils. In other words, even after paying for the expert, she will

do better by $10,000, or 10,000 utils. In addition, with or without the expert litigation is

worthwhile.

To be sure, the possible recoveries in a case, their odds of occurring, the costs of

litigating, and their effect on the outcome of litigation can take various forms. That Penelope

will make different choices in the hypothetical situation is an artifact in part of the values I have

assigned to each of these considerations. At times, risk averse plaintiffs will make the same

expenditures in EVA and trial. The point, however, is that in EVA, as opposed to trial, risk

averse parties generally have incentive to make any investments that would yield a net benefit on

average in dollars.[188] It is also worth noting that risk averse plaintiffs would not be expected to

make investments that would produce a net loss. They have no desire to take unprofitable risks

just for the sake of gambling.

iii.     Summary of the Effect of EVA on Expenditures in Litigation

In general, then, EVA should encourage risk averse litigants to make any expenditures,

and only those expenditures, that will on average produce a net benefit in dollars This will

mean that EVA should enable some parties to avoid litigation costs that yield a net loss on

average in dollars and that they would incur in preparing for trial. Conversely, EVA should

enable other parties to make expenditures that yield a net gain on average in dollars and that they

would not make if their only option was to litigate to a winner-take-all result.[189]

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[188] This follows, with some simplifying assumptions, from the proof in Appendix IV.

[189] Admittedly, the analysis will at times be more complex than this argument suggests. For example, outcomes in litigation often are not binary. Moreover, the preferences of litigants may not conform to the models of a utility curves suggested above, if indeed they are consistent with any utility curves at all. Examples abound of preferences different than those we have assumed for Penelope and Dwayne. One likely possibility is a plaintiff who retains an attorney on a contingency basis. The attorney may be willing to pay the costs of litigation and to seek

iv.     EVA May Promote Efficient Expenditures in Litigation.

EVA may promote efficient investment in litigation.  This should be true if one accepts

two premises:  first, that the substantive laws and procedural rules are designed to be efficient;

and, second, that courts generally craft rules to promote efficiency relying on the simplifying

assumption that parties are risk neutral.

The idea that the substantive laws and the rules governing litigation tend to be efficient is

not novel.  Economists have long argued that these rules tend to approximate efficiency, if only

under the guidance of something akin to Adam Smith's invisible hand.[190]  This does not mean

law and economics has no room to criticize existing doctrine or to suggest reforms.  It is just that

the law on the whole can be explained reasonably well as promoting efficiency.[191]

At the same time, the bulk of economic analysis—descriptive and prescriptive—tends to

assume that litigants are indifferent to risk.  To be sure, economists recognize that parties tend to

be averse to risk.[192]  However, as a practical matter, preferences about risk are too variable and

too complicated for economists to take them into account routinely.  Aversion to risk often

confounds general predictions about how people will behave.  As a result, most economic

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reimbursement for those costs and recovery of attorneys' fees only if the plaintiff wins.  Under such circumstances,
a different set of incentives in litigation may result.  Of course, the incentives may not be that different.  The concern
about risk may just shift from the client to the attorney, who may bring about decisions that are similar to the ones
the plaintiff would make if her own money were at risk.  Similarly, Dwayne may be insured, as most motorists are.
The insurance company would likely be far less concerned than an individual about a loss of several hundreds of
thousands of dollars at trial for any one case.
        Still, the analysis in the text should be typical for those risk-averse litigants for whom EVA is an attractive
choice.
[190] See, e.g., Richard Posner, The Ethical and Political Basis of the Efficiency Norms in Common Law Adjudication,
8 Hofstra L. Rev. 487, 488 (1980); John C. Goodman, An Economic theory of the Evolution of Common Law, 7 J.
Legal Stud. 393, 394-95 (1978); George L. Priest, The Common Law Process and the Selection of Efficient Rules, 6
J. Legal Stud. 65, 65-66 (1977).
[191] See Frank I. Michelman, Some Uses and Abuses of Economics in Law, 46 U. Chi. L. Rev. 307, 308 (1979)
(acknowledging that the law, taken as a whole, appears as it would if judges sought to maximize social wealth).
[192] See, e.g., Posner, Economic Analysis of Law, § 1.2, at 12.

arguments, in practice if not in theory, assume risk neutrality. With this assumption in place, economists seek to create incentives so that parties promoting their own economic self-interest will act to maximize wealth in society as a whole.

Within this framework, the incentives EVA creates to invest in litigation look quite good when compared to those in trial. The rules governing litigation, it is assumed, generally encourage parties to make efficient investments. Aversion to—or a taste for—risk will distort these incentives. EVA serves as a corrective to that distortion. It diminishes the role that risk plays in litigation. As a result, parties are more likely to respond as if they are indifferent to risk. They will not to make investments in litigation that produce a net loss on average in dollars. They will invest if doing so produces a net gain net gain on average in dollars. The parties' behavior will approximate risk neutrality, the kind of behavior that courts (and economists) usually assume when it comes to crafting rules.[193]

b.      EVA May Enable Vulnerable Parties to Invest in Litigation to Protect their Legal Rights.

EVA may be of particular assistance to vulnerable members of society, who will be able to invest in EVA as if they were risk neutral. As noted, vulnerable members of society tend to be particularly averse to risk.[194] They are likely to be motivated by this risk aversion to forego investments in litigation that would benefit them on average in dollars or to make investments that will yield a net loss on average in dollars. EVA should correct these tendencies.

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[193] This is true, for example, of the theory of efficient breach of contract. Efficiency can explain the rule that a breaching party should restore the non-breaching party to the same position she would have occupied but for the breach. Doing so will deter breaches that will not add to social wealth. See Richard Posner, Economic Analysis of Law, at § 4.8, 119. This simple explanation, however, fails to take into account risk-aversion (or, for that matter, the cost of resolving a dispute). If one does consider risk aversion, the analysis would become much more complicated. It is not at all clear that giving a party an efficient remedy at the end of trial if the party wins will translate into efficient conduct. The same is true with the rule that plaintiffs are to receive compensatory damages in tort. Id. at § 6.10, 191-92. Indeed, economists often assume that incremental steps toward efficiency will help to promote efficiency, even though this may not be true in our highly inefficient world. For an overview of a theory that questions this way of proceeding—the so-called "Theory of Second Best"—see John J. Donohue III, Some Thoughts on Law and Economics and the General Theory of Second Best, 73 Chi.-Kent L. Rev. 257 (1998).

[194] Note, Settling for Less: Applying Law and Economics to Poor People, 107 Harv. L. Rev. 442, 444 (1993).

Moreover, for similar reasons, EVA may improve the prospects for vulnerable parties in settlement. Vulnerable parties negotiating in the shadow of trial will be hindered by the prospect of an investment strategy that would not pay off on average in dollars For example, a plaintiff might feel compelled to accept a low settlement in recognition of her inability to fund litigation, or a defendant might pay substantial damages in part based on the expendituresthat he would feel unable to resist, even though they would not make sense in average dollars. By encouraging vulnerable parties to make those investments and only those investments that pay off on average in dollars, EVA should help vulnerable litigants to insist on settlement terms that more closely reflect the average outcome at trial than if they were litigating to a winner-take-all result.[195]

IV.     Assessing EVA from Various Theoretical Perspectives.

Three qualities of EVA have been the focus of the analysis thus far: it allows litigants to insist on their legal rights without the risk of trial; it tends to produce relatively small errors, whether measured as expected error costs or as the size of errors in particular cases; and it encourages risk averse litigants to make those investments and only those investments in litigation that will yield a net gain on average in dollars. The next issueis whether in light of these characteristics EVA should be made available as an option to disputants. Three perspectives are of particular use in addressing this issue: law and economics, rights theory, and a public-life conception of trial.[196] Part IV argues that parties should be permitted to choose EVA no matter which of these perspectives one adopts.

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[195] As noted above, powerful litigants may resist EVA for this reason, but they may not. See supra Part III.A.iii.b.

[196] A fourth possible perspective is libertarianism. Libertarianism champions informed choice as an end in itself. It holds that people should be allowed to make decisions for themselves to the greatest extent possible. See, e.g., Robert Nozick, Anarchy, State, and Utopia 57-87 (1974). Making EVA available to disputants finds strong support in libertarianism, for EVA should both expand and clarify disputants' options. Because no party would be forced to participate in EVA against its will, allowing parties to choose EVA does not appear to infringe on anyone's rights. Still, this argument is not particular to EVA. It holds true for any alternative to trial. For that reason, it does not warrant extended discussion.

A. Law and Economics.

Perhaps the most sympathetic view of EVA should come from economists. They generally seek to structure the law to encourage efficient behavior. For present purposes, it is useful to define behavior as efficient if it distributes goods and services to the person who would be willing to pay the most for them or, to use an equivalent formulation, if it allocates them in the same was as would a market with no barriers to transactions.[197]

i. Deferring to the Choice of the Parties.

One would expect the initial reaction of economists to be to endorse EVA. After all, parties will engage in EVA only if they choose to do so. This should mean that for disputants, EVA is wealth-maximizing. Economists generally defer to the private choice of parties.[198]

Economist may nevertheless have some qualms about EVA. In particular, a concern would be that making EVA available as a choice may have undesirable effects on the incentives it creates for a party deciding whether to take action that may violate someone's legal rights. But, as Professor Hylton has pointed out in a related context, the parties should take into account the benefit of the incentives created by legal rights in deciding whether to agree to alternatives to trial.[199] That decision will reflect the cost of avoiding a rights violation, the harm from failing to

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[197] See Richard Posner, Economic Analysis of Law at § 1.2, 12-16. I mean here to adopt the Kaldor-Hicks conception of efficiency, as does Posner and, he claims, as do most economists in practice. Id. at 14.

[198] Economists are apt to treat dispute resolution as a private good. See, e.g., William M. Landes & Richard A. Posner, Adjudication as a Private Good, 8 J. Legal Stud. 235 (1979). For a criticism of this approach see, e.g., Paul D. Carrington, Adjudication as a Private Good: A Comment, 8 J. Legal Stud. 303 (1979). Indeed, if private choices of parties were generally viewed as undesirable because they distort the incentives created by the legal system, settlement should be viewed as undesirable as well. However, the opposite is true. Economists generally approve of settlement. They should therefore approve of EVA as well, if parties prefer it to trial.

[199] See generally Keith Hylton, Agreements to Waive or to Arbitrate Legal Claims: An Economic Analysis, 8 S. Ct. Econ. Rev. 209 (2000). Professor Hylton addresses the issue initially in the context of waiver of legal rights, but his analysis extends to alternatives to trial, as he notes. See id. at 213.

do so, and the cost of the competing dispute resolution options.[200] As a result, the parties should enter into EVA only if, all things considered, it is the best choice for them.[201]

Economist may also focus on externalities in raising concerns about EVA. In particular, they may worry about the effect of the incentives EVA would create on the rights of third parties. There are two responses to this concern. First, as Professor Hylton contends, the choice of some litigants (or prospective litigants) to enter into EVA should not affect third parties adversely. Third parties can pursue their own claims if their legal rights are violated and can choose their own preferred method of dispute resolution.[202]

Second, even if one does not accept Professor Hylton's argument regarding externalities—perhaps because not all harms give rise to legal rights—EVA would seem as likely to be efficient as trial. Assuming, for purposes of argument, that the law is efficient, EVA should not compromise that efficiency. After all, EVA does not change the average liability of defendants or the average recovery of plaintiffs. Those remain the same, as long as they are measured in average dollars. In this sense, EVA leaves the prevailing legal standard intact. As a result, when measured in expected dollars, EVA should not change the incentives the law creates.

One might argue in response to this last point that EVA eliminates risk and, thereby, does to some extent change incentives. This change could lead to inefficiencies. But this contention assumes a precision to economic analysis that probably does not exist in the real world. Economists, and courts to the extent they adopt economic analysis, infrequently take into account risk aversion in analyzing efficiency. They tend to work in average dollars. As a result,

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[200] Id. at 218-22.
[201] This conclusion follows naturally from the Coase Theorem, as Professor Hylton points out. Id. at 222.
[202] Id. at 238-39.

EVA's tendency to decrease risk is just as likely to improve the efficiency of incentives as it is to render the legal system less efficient.[203]

ii.  Minimizing Errors

Another reason that economists should approve of EVA is that it tends to minimize errors.  As discussed above, unlike proportionate damages, it produces the same expected error costs as trial.  Moreover, like proportionate damages, EVA avoids the largest errors in particular cases.  These characteristics of EVA should mean that actors will anticipate relatively small errors in EVA.  Economists generally approve accuracy in adjudication and believe that accurate results should promote efficiency.[204]  EVA fares well by this criterion.

In this regard, it is important to note that some scholars have pointed out that accuracy in adjudication is not always measured most effectively by the average size of errors or the size of errors in particular cases.  Professor Levmore has made a strong argument, for example, that the preponderance-of-evidence standard will not minimize expected error costs in cases involving recurring wrongs and that in these circumstances it may be better at times to award proportionate damages.[205]  EVA produces the same expected error costs as trial, so it, too, will not perform as well as proportionate damages in these circumstances.

Two responses seem appropriate.  A first, minor point is that recurring wrongs may be the exception, which can explain in part why proportionate damages are not common in our legal

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[203] Indeed, as I have noted, EVA may better promote efficiency, to the extent it encourages parties to act as if they are risk-neutral.

[204] This is one of the premises of Posner's analysis of efficient rules of civil procedure and evidence.  See Richard Posner, Economic Analysis of Law, § 21.2, at 549-50 (analyzing efficient rules of civil procedure); Richard Posner, An Economic Approach to the Law of Evidence, 51 Stan. L. Rev. 1477, 1480-87 (1999) (analyzing efficient rules of evidence).

[205] See Levmore, Probabilistic Recoveries, 19 J. Legal Stud. 691, 697-98 (1990).  Levmore use the term the "probabilistic rule" for what I have labeled proportionate damages.  See id. at 697.  Also, his proposal is not limited to proportionate damages.  He suggests a hybrid of three approaches, depending on the confidence of the finder of fact in the proper result of a case, that at times would use a winner-take-all approach, at times would award proportionate damages, and at times would award a form of restitution. Id. at 721-25.  This greater level of subtlety does not affect the point in the text.

system. If so, Levmore's criticism of the preponderance-of-evidence rule is valuable, but only in limited circumstances, as he recognizes.

The second, more important point is that EVA and proportionate damages are not mutually exclusive. If courts would do better at times to award proportionate damages, and if they are able to identify the cases in which that is true, they may do well to adopt Professor Levmore's proposal.[206] His approach would then become part of the calculation in EVA. The arbitrator would make a prediction about the average award in court, taking into account the possibility that trial would result in proportionate damages. Nothing about this or any other legal standard is incompatible with EVA.

iii. Encouraging Efficient Expenditures in Litigaiton.

A third reason economists may find EVA attractive is because of the incentives it creates for investment in litigation. Evaluating this claim is tricky because economists have had difficulty coming up with a compelling standard for when litigation costs are efficient. They have at times addressed this issue, most notably in the context of discovery and the rules of evidence.[207] But no consensus has emerged.[208]

One plausible model for efficient investment in litigation is presented by Richard Posner.[209] He sets it forth in the context of assessing the rules of evidence. His analysis can be extended to questions of law, depending on one's philosophical view.[210] According to Posner, two competing values are at stake in gathering evidence (and, I would add, in presenting it to the

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[206] See id. at 721-25.

[207] See, e.g, Robert D. Cooter & Daniel L. Rubinfeld, An Economic Model of Legal Discovery, 23 J. Legal Stud. 435 (1994); Bruce L. Hay, Civil Discovery: Its Effects and Optimal Scope, 23 J. Legal Stud. 481 (1994).

[208] As Robert Bone notes, one difficulty is that there is no ready measure of the social benefits from accuracy in litigation. See Robert G. Bone, Civil Procedure: An Economic Analysis of Civil Procedure 218 (2003).

[209] Richard Posner, An Economic Approach to the Law of Evidence, 51 Stan. L. Rev. 1477 (1999). Actually, he discusses two equivalent models.

[210] Acceptance of this view may be implicit in Posner's discussion of the impact of cases as precedent in addressing the social value of adjudicative accuracy.

court).  First, there are the costs of gathering evidence.  These may be borne by one or both parties, by the court in resolving discovery disputes, or by third parties or society at large.[211]  Second, there is the benefit of accuracy at trial.  Additional evidence can enhance the prospects that the court will decide a case accurately, but, generally, with a trade-off in higher costs.

Balancing these costs and benefits, Posner's plausible view is that an investment in litigation is efficient if it costs less than its predicted improvement in accuracy at trial.[212]  An improvement in accuracy, in turn, is measured by the product of the increased odds that the court will decide a case properly and the stakes in the litigation.[213]

One could argue based on this model that EVA creates more efficient incentives to invest in litigation than trial.  After all, EVA should tend to encourage investments in litigation if and only if they will result in a net improvement to a party's position.  In other words, the amount of the investment must be less than the change in accuracy in the predicted outcome multiplied by the stakes.

Some problems arise with this justification for EVA (some of which apply more generally to Posner's model).  First, a party in deciding whether to invest to enhance its prospects in litigation has little incentive to consider the costs and benefits to others of trial.  The party may ignore the costs it imposes on other participants in litigation, including the opposing party (who may have to respond, for example, to a discovery request), the court (which may have to resolve a discovery dispute), or third parties (which may have to respond to a subpoena).  Indeed, a party may use potential harms from discovery strategically to extract a settlement on favorable terms

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[211] These costs can include not only time and money, but other harms that come from discovery including, as in Posner's example, discouraging repairs after an accident if they may be used as evidence of past liability.
[212] Richard Posner, An Economic Approach to the Law of Evidence, 51 Stan. L. Rev. 1477, 1480-87 (1999).
[213] Id.

from an adversary.[214]  Alternatively, the party may fail to conduct discovery that it perceives as too costly, even if it would benefit others, perhaps by improving the likelihood of a correct decision that will serve as precedent.  Second, a party's prospects may improve by misleading the court, not just by enlightening the court.  Additional evidence may lead the court astray; one cannot assume it will always enhance the accuracy of the court's decision.[215]  Third, the parties' competing investments may cancel out and yet they may not be able to cooperate sufficiently to refrain from making those investments.[216]  Fourth, the benefit to society from the accurate resolution of a case may not in fact correlate to the stakes to the parties.  As Posner notes, for example, high-stakes litigation may depend in part on interpretation of a law that has subsequently been revised.[217]  The value of accurate interpretation of the law will not necessarily correspond to the amount that is in controversy.

The difficulties of arriving at a compelling standard for efficient investment in litigation may support a relatively modest claim in favor of EVA:  it encourages litigants to make those investments and only those investments in litigation that will yield a net gain to a party on average in dollars.  Approving of this effect is not inconsistent with adopting some other standard, like Posner's, as a guide to formulating the rules of evidence or procedure.  It simply adds another, useful criterion:  all else being equal, a standard for dispute resolution is efficient if

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[214] Setear refers to this use of discovery as an "impositional benefit" as opposed to an "informational benefit."  John K. Setear, *The Barrister and the Bomb:  The Dynamics of Cooperation, Deterrence, and Discovery Abuse*, 69 B.U. L. Rev. 569, 581 (1989).

[215] This point is reminiscent of David Luban's criticism of the adversary system:  rather than the misleading claims by each party canceling out, they may be cumulative, yield an outcome that is doubly distorted.  David Luban, Lawyers and Justice:  An Ethical Study 69-71 (1988).

[216] The inability of the parties to cooperate means that they may face the much-discussed "prisoner's dilemma."  For a discussion of this concept see R. Duncan Luce and Howard Raifaa, Games and Decisions:  Introduction and Critical Survey 95 (1957).

[217] Richard Posner, An Economic Approach to the Law of Evidence, 51 Stan. L. Rev. 1477, 1486-87 (1999).

it encourages litigatants to invest in litigation as if they were risk-neutral. That is what EVA does.

This conclusion follows, as discussed above, from assuming that the substantive and procedural rules are likely to be efficient, but only under the simplifying assumption that litigants are risk-neutral.[218] EVA simply helps to get litigants to conform to this model of behavior. EVA thereby should promote efficiency.

iv. Reducing the Costs to the Public of Dispute Resolution.

A final consideration in assessing EVA from an economic perspective is the effect it would have on the public cost of administering litigation. This issue tends to be of particular importance to economists. They see one of the main harms of litigation as the costs that it entails and are particularly concerned that litigants lack incentive to take into account the costs they impose on others.[219] The salaries of judges and courtroom staff, the time of jurors who are conscripted to service, the maintenance of buildings that house trials—these are all externalities that litigants have little reason to consider in deciding how to resolve their disputes.[220]

Much like other alternatives to trial, EVA should ease the burden on the public of resolving disputes. This is another of its potential benefits, although it is not special to EVA. All forms of alternative dispute resolution that lure disputants away from trial should on the whole ease the burden on the state and federal judiciaries. In EVA, as with other private means

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[218] Posner's economic analysis of the rules of evidence are typical in this regard—they offer no systematic account of the effects of aversion to risk. See generally Richard A Posner, An Economic Approach to the Law of Evidence, 51 Stan. L. Rev. 1477, 1480-77 (1999).

[219] Posner, for example, has identified minimizing the costs of adjudication and minimizing errors in adjudication as the twin aims of the rules of civil litigation. See Posner, Economic Analysis of Law § 21.2, at 549, 550 n.2. It is worth noting, however, that he would define costs broadly, as including more than just the time and money invested in litigation. Richard A. Posner, An Economic Approach to the Law of Evidence, 51 Stan. L. Rev. at 1480-77.

[220] For a similar point see Keith Hylton, Agreements to Waive or to Arbitrate Legal Claims: An Economic Analysis, 8 S. Ct. Econ. Rev. 209, 213 (2000).

of dispute resolution, the parties pay for the dispute resolution process, which otherwise would be borne by the public.[221]

In sum, for various reasons, economists should conclude that making EVA available as an option would promote efficiency.

## B. Rights Theorists

A second view from which to asses EVA is that of rights theorists. By rights theorists I mean those who view legal rights as being intrinsically worthy of respect. A common justification for this view is that the law has a "moral authority."[222] Professor Ronald Dworkin has developed perhapsthe most complete argument of any contemporary scholar as to why the law should be read has having a moral force that warrants our allegiance.[223]

Rights theorists should find much about EVA that is attractive. As discussed above, EVA honors the prevailing legal regime in way that other forms of imposed compromise do not. Moreover, also as discussed above, EVA should empower the most vulnerable members of

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[221] A possible argument to the contrary is that EVA may increase the overall rate with which parties initiate litigation. After all, if the possibility of EVA is attractive, plaintiffs who otherwise might not bring a claim may do so in the hope that the opposing party will ultimately agree on EVA. Further, predispute arbitration clauses opting for EVA could increase the total number of disagreements resolved by arbitrators' decisions. Some of those decisions, in turn, may end up in the judiciary, if only through actions seeking to challenge or enforce the results of EVA.

       Still, it would be surprising if EVA would not produce net savings for the public. One would expect that EVA would have to be extraordinarily popular—and a common choice in situations where otherwise trials would occur—before people would take it into account in deciding whether to pursue litigation. The costs from the change in the marginal incentive to prosecute litigation because of EVA should be much smaller than the savings from cases in which a dispute does got to EVA but would otherwise have proceeded to trial. Moreover, only a small percentage of arbitrated cases end up in the judicial system at all. One would expect enforcement to be much less costly for the judiciary in any particular case, and in cases in general, than the trials that would occur without EVA. On the whole, then, EVA should reduce the cost to the public of dispute resolution.

       Finally, it is true that the extent of the cost reductions from EVA will not be easy to detect. Not every case resolved by EVA would otherwise have gone to trial. Disputants may choose EVA over other means of private dispute resolution, including negotiation, mediation, and traditional binding arbitration. Still, if EVA is the only viable alternative to trial for some parties, it should lower the costs to the public of dispute resolution as a whole.

[222] I borrow the phrase from David Luban, Lawyers and Justice: An Ethical Study 31-49 (1988)

[223] See generally Law's Empire, esp. 2111-13 (1986).

society by allowing them to pursue their legal rights without facing the risks of trial and by enabling them to invest in litigation as if they were risk-neutral.[224]

Rights theorists, however, might be less favorably impressed than economists with the approach EVA takes to errors in adjudication. After all, it could be argued that EVA abandons the effort to decide cases exactly correctly.[225] A right theorist might criticize EVA because parties' rights should be vindicated and that means decision-makers should try to get a case precisely right.

But this view is unsatisfying. Although adjudicatory errors are undesirable, they are also inevitable. And trying to get a case precisely right comes at a cost. In particular, a winner-take-all approach does not mean that the decision-maker will err by less on average than would EVA. To the contrary, if EVA is done properly, it will produce the same errors on average as trial and, in any given case, any error it produces will tend to be relatively small.

Moreover, EVA is highly respectful of legal rights, once one acknowledges that litigation necessarily entails uncertainty. The compromises it produces are in a sense pure. As I have argued, they reflect only the law and the evidence, as they would be interpreted by potential decision-makers. The only difference between trial and EVA in this regard is that trial reflects a single decision-maker's assessment of the parties' legal rights while EVA reflects a blend of how an expert believes different decision-makers might resolvea dispute. None of this is to deny that a rights theorist might place some value on the potential trial holds to give full vindication to the legal rights of an aggrieved party. It is just to recognize that we cannot count on trial to be accurate in assessing the parties' legal rights.

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[224] Rights theorists have often been concerned about the legal rights of the most vulnerable members of society. See, e.g., Own Fiss, Comment, Against Settlement, 93 Yale L.J. 1073, 1076-78 (1984).

[225] But see John E. Coonse, Compromise as Precise Justice, 68 Calif. L. Rev. 250 (1980) (discussing possibility that apportionment may offer precise justice).

EVA, then, has both strengths and weaknesses. On one hand, EVA honors rights in a way that other forms of imposed compromise do not. Further, EVA may help the most vulnerable members of society to pursue their legal rights. Even when it comes to errors in adjudication, EVA will produce the same errors on average as trial and avoid the largesterrors that trial may produce. Once one accepts that errors are inevitable, this is a pretty attractive combination of characteristics.

On the other hand, EVA does not hold the potential for unqualified vindication of a party's legal rights. Some parties may value this highly, particularly where litigation is not so much about the practical relief it may yield as about declaring who is right and who is wrong. Although I would argue that the balance tips in favor of EVA, there may be no clearly preferable method for resolving disputes in light of these competing considerations.

Nevertheless, one firm conclusion may be possible: the choice should be left to the parties. After all, if the concern in civil litigation is to protect the legal rights of the individual to seek redress, in our system that right is alienable. This makes sense of the clearly established rule that a party may choose not to seek legal vindication through a civil case at all. She also may cede her right to sue for money or trade it for some other from of compensation.

Indeed, this holds true even when the underlying right a party possesses is not itself alienable. In this regard, it is important to distinguish between those rights that the substantive law protects and the right to seek redress in court. Some substantive rights may not be permissible objects of exchange. It may be that a person cannot give them away or can do so only under limited circumstances. So, for example, neither suicide nor consent to euthanasia is

generally legal.[226]  The right to live is often not alienable.  A person cannot accept a payment and

in return agree to be the target of a killing.  But a person who has been the victim of attempted

murder may settle any civil claims to which the attack gives rise, choosing financial

compensation, an admission of guilt, an apology, or some other form of compensation for an

agreement not to pursue litigation.  The underlying right, in other words, is *not* alienable, but the

right to seek redress in civil litigation *is* alienable.

If the right to seek redress in court is individual and if it is alienable, EVA should be

permissible.  Perhaps for a *court* to impose compromise against an aggrieved person's will

would violate that person's right to legal redress.  The aggrieved person may have a right to

insist on taking a chance on full vindication, which EVA will not generally provide.  This is a

potential argument against imposing a compromise in court.  However, we generally permit

disputants to settle their civil claims on whatever terms they want and we do not require them to

prosecute their civil claims at all.  Given this deference to individual choice, making EVA

available as an option should be consistent with the individual right to vindication in court.

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[226] For an argument in support of the inalienable right to life and its implication for assisted suicide see Daniel Avila, Assisted Suicide and the Right to Life, 16 Issues L. & Med. 111 (2000).

C.   The Public-Life Conception of Trial

The perspective most likely to provide a basis for rejecting EVA is one that focuses on the message that court decisions communicate to society.  This message can take many forms.  It may be as pragmatic as providing precedent that clarifies how courts are likely to resolve particular cases in the future.[227]  It may be as lofty as expressing the values that the law instantiates and thereby inculcating them in citizens.[228]  EVA would deprive society of these benefits.

From this perspective, looking at the size of errors in particular cases does not capture the gains and losses associated with EVA.  As a private form of dispute resolution, EVA does not permit the government to use resolution of a disagreement as a means of communication.  EVA does not entail a public proclamation of who was right and who was wrong, nor will resolution of a legal issue in EVA be binding on future litigants.

Indeed, even if a court, as opposed to an arbitrator, were to impose a compromised outcome, the gains and losses might not be reflected fully by an assessment of the size of errors.  Communicating a legal rule, or the values that a rule embodies, probably cannot be achieved in half-measures.  A result that balances possible legal rules could leave the law ill-defined and, indeed, may contribute to its ambiguity.  Even if a court were to make a determination of the law, and to compromise based only on its doubts about the facts, the message it communicated might be garbled.  At the least, a new standard would have to be developed to distinguish holdings from dicta, potentially confusing the import of a court's ruling on the law.  And the failure of a court to take a clear stand on what did and did not occur in a case might undermine

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[227] Posner, Economic Analysis of the Law, § 20.3, at 543-44..

[228] This is the concern, for example, of Charles Nesson, The Evidence or the Event?:  On Judicial Proof and the Acceptability of Verdicts, 98 Harv. L. Rev. 1357 (1985).

confidence in the court's judgment in a particular case,[229] perhaps even in the legal system as a whole.[230]

These concerns about the message litigation communicates have some force in court. That the parties want a court to impose a compromise may not be a sufficient justification for it to do so. After all, parties do not have unfettered power to formulate the standard a court will use to resolve their disputes. They can choose to settle. But if they ask a court to impose a result, there are limitations on the willingness of courts to apply the law as the parties wish.[231] Giving up this control may be a fair exchange for the burden that the parties are imposing on the legal system.

Two reasons nevertheless support allowing parties to choose EVA. First, our system does not generally conscript parties into participating in civil litigation so as to send a message to society. Generally, if the parties to litigation agree on the terms of settlement, they may deprive society of the benefits that trial (and appeal) would provide.[232] Consistent with this general approach, parties should be allowed to choose EVA. Second, to the extent that EVA would benefit vulnerable members of society, we should hesitate to foreclose it as an option. The least well-off in society should not be forced to bear the burden of providing our legal system with

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[229] Id. at 1357-62.

[230] Id. at 1368-77.

[231] Of note along these lines is the current controversy over whether courts should honor the decision of the parties to expand judicial review of the award in arbitration. See, e.g., Lee Goldman, Contractually Expanded Review of Arbitration Awards, 8 Harv. Negotiation L. Rev. 171 (2003); Margaret M. Maggio & Richard A. Bales, Contracting around the FAA: The Enforceability of Private Agreements to Expand Judicial Review of Arbitration Awards, 18 Ohio St. J. Disp. Res. 151 (2002).

[232] Indeed, even in areas where a court must approve a settlement, the concern is with ensuring only that its terms are fair. This is true for example of the requirement in class actions, designed to protect absent class members, that a settlement must be "fair, reasonable, and adequate" to meet the approval of a court under Federal Rule of Civil Procedure 23(e). See, e.g., Officers for Justice v. Civil Serv. Comm'n, 688 F.2d 615, 625 (9th cir. 1982), cert. denied, 459 U.S. 1217 (1983). Courts will not generally take into account the benefit to society of trial or appeal.

precedent and declaring the values that our legal system honors.[233]  For these two reasons, if we want to encourage litigation, we should make it attractive as an option and not deter people from pursuing other means for resolving their disputes, including EVA.

V.        Practical Concerns about EVA.

Finally, several additional practical concerns arise in analyzing EVA.  These include: whether EVA will be able to achieve predictability and reliability; whether biases will affect arbitrators in EVA; and which factors should be considered in assigning an expected value to a case.  Each warrants brief discussion.

A.  Predictability and Reliability in EVA.

In time, EVA may progress beyond relying on the informed judgment of a seasoned lawyer or judge.  Empirical evidence may be amassed to support Expected Value Arbitration.  Such evidence could lend accuracy and predictability to the awards imposed by expected value arbitrators.  Institutions dedicated to providing arbitration services will have incentive to collect data on the outcomes of litigation in various fields and to make that data available to disputants contemplating Expected Value Arbitration.  Litigants entering Expected Value Arbitration with such service providers would thus retain their right to argue their case before a neutral party, while gaining confidence about the likely outcome of adjudication and without fear of an aberrantly unfavorable result.

Indeed, use of empirical evidence to assign expected value may be the next natural step in a progression that has already begun.  Consider the decision of Judge Weinstein in Geressy v.

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[233] For a similar point in regard to the allocation of attorney's fees see Joshua P. Davis, Toward a Jurisprudence of Trial and Settlement:  Allocating Attorney's Fees by Amending Federal Rule of Civil Procedure 68, 48 Ala. L. Rev. 65, 138 (1996).

Digital Equipment Corporation.[234]  New York law required the federal court in a diversity action

to assess whether the amount of the jury award "deviate[d] materially from what would be

reasonable compensation."[235]  In undertaking this effort, Judge Weinstein focused in particular

on a large award for pain and suffering.  He used as a guide a statistical analysis of awards in

past cases.  First, he grouped together similar cases.  Second, he assessed the statistical variation

within the group.  Third, he defined in statistical terms the materiality of the deviation.

A similar sort of analysis could add rigor and predictability to EVA.  Providers of dispute

resolution services could identify the characteristics of disputes that appear to have the most

significant influence on whether the plaintiff will win and the amount of any recovery.  This

information could then be provided to litigants, who would know the considerations that will

inform resolution of the dispute and the likely recovery of the plaintiff.  Of course, some crucial

information may have to await an assessment by the arbitrator.  The credibility of a key witness,

for example, may figure prominently in assessing the probable result in a case, a determination

which cannot be made authoritatively until the witness actually testifies.  In general, however,

transparency about the methodology for calculating awards in EVA and the data on which the

arbitrator will rely should clarify the choices available to litigants and allow them a greater

ability to anticipate the outcome of EVA.

None of this is to say that EVA would at first be perfectly accurate or predictable.  Judge

Weinstein himself recognized in Geressy the imprecision of his effort.[236]  He hoped for

improvement as "[i]n time, a sophisticated literature and precedents may develop."[237]  EVA at

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[234] 980 F.Supp. 640 (E.D.N.Y. 1997)
[235] CPLR 5501(c).  The U.S. Supreme Court had previously held that application by a federal court of this New York standard in a diversity action did not violate the Seventh Amendment to the U.S. Constitution.  See Gasperini v. Center for Humanities, Inc., 518 U.S. 415 (1996).
[236] Geressy, 980 F.Supp. at 655-63.
[237] Id. at 663.

first would be similarly imprecise. With experience, however, Expected Value Arbitration might benefit from—and, indeed, contribute to—the development of a literature and data regarding court awards under various circumstances. The result could well be a relatively predictable form of dispute resolution—indeed, one that may be more predictable than trial.

B.      Biases that May Affect Arbitrators.

Given the novelty of EVA, it is also important to consider how arbitrators might stray from the task assigned to them. In particular, they may be influenced by various biases. Two are likely. The first is that the arbitrator will not be able to separate her view of the facts and the law from the views others might hold. In other words, she may have a tendency to impose a winner-take-all approach rather than the average of predicted results. A second possibility is that arbitrators will be apt to "split the difference" too often. Rather than rule in a way that will reflect the chances of success of a litigant with a strong case, the arbitrator will choose an outcome that strikes a balance between the positions of each party.

Both of these tendencies seem possible. A few general points should be made in response to them. The first is that these tendencies may be off-setting. An arbitrator's inclination to "split the difference" may run directly contrary to her view of how the case should be decided. When both tendencies motivate a single arbitrator, they may cancel out. Of course, this reasoning will not apply when the two biases skew the results in the same direction or when an arbitrator is motivated by one tendency to the exclusion of the other.

A second general point about possible bias is that any judgment on EVA should await its actual practice. Only with experience will we be able to assess whether the outcomes vary from the averages at trial and, perhaps more important, whether litigants feel that they do and therefore that the process does not achieve its avowed goal.

A third, related point is that arbitrators may become progressively more disciplined about imposing expected value outcomes over time. This may be aided by an institution's experience over time with using data to make determinations more reliable and predictable, as discussed in Part IV.A.

Aside from these general responses, brief attention to each type of bias is appropriate. The first concern is that arbitrators will have a tendency to decide issues on the merits. This may occur because of a conscious decision not to follow the rules of Expected Value Arbitration. More likely, an arbitrator will be unaware that she is overly optimistic that others will agree with her. This would mean that expected value outcomes will approximate winner-take-all outcomes more than they should. While this result will not honor the choice of the parties, it should not keep EVA from being a viable alternative to trial. Such a bias would merely make EVA a hybrid between the standard it is supposed to impose and trial.[238] This hybrid may be attractive to some litigants, even if they would prefer a purer form of EVA.

The second concern is that arbitrators may avoid difficult decisions. They may be tempted to cheat toward an inappropriate compromise. But this problem extends beyond expected value arbitrators. In fact, this temptation may be stronger in trial, given the harsh results it tends to produce, than in EVA, where the arbitrator is permitted to compromise based on uncertainty. Given that trial suffers from this possibility in much the same way as EVA, it does not seem to be a reason to rule out EVA as an option for litigants who prefer it to trial.

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[238] Indeed, many suspect that this hybrid already exists in winner-take-all litigation, where decision-makers, including arbitrators and juries, may cheat toward an average result in difficult cases. In regard to arbitrators, see, e.g., Stephen J. Ware, Default Rules from Mandatory Rules: Privatizing Law Through Arbitration, 83 Minn. L. Rev. 703, (1999) (discussing evidence that arbitrators often do not follow a strict interpretation of the law). In regard to juries see, e.g., Lars Noah, Civil Jury Nullification, 86 Iowa L. Rev. 1601, 1612-18 (2001) (discussing evidence that juries nullify legal standard, including by reaching compromise verdicts that split the difference between either side prevailing).

Indeed, in dispute resolution generally, perhaps the most effective check on both of the biases discussed above would be to have as many clearly defined options available to litigants as possible. Decision-makers who feel that litigants have made an informed choice may be less reluctant to impose the requested standard rigorously. For example, many lawyers believe that some decision-makers already "split the difference," even though they are supposed to apply the law to the facts just as a court would do.[239] This is troubling because litigantsrarely know whether, for example, their arbitrator will choose to impose a compromised outcome and, if so, what the arbitrator will take into account in reaching a compromise. Traditional arbitrators may be more rigorous in undertaking their assigned task, however, if they know litigants could have chosen EVA and declined to do so. Making EVA available therefore would not only allow litigants to have a compromise imposed on them but, ironically, it might also increase the ability of litigants to pursue a winner-take-all result in arbitration, enhancing their autonomy whatever form of dispute resolution they choose. [240]

C. Factors in Assigning the Expected Value of Trial.

EVA depends in part on the law and the evidence. Various other factors, however, affect the average result of trial, some of which the arbitrator should take into account and others the arbitrator perhaps should not.

Most troubling may be the proper response of the arbitrator if Penelope argues that the results of EVA should reflect her advantage if she has greater resources than Dwayne. He may

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[239] Id.

[240] A difficulty arises in this analysis because a party may be forced into winner-take-all trial or arbitration who in fact would prefer EVA. This is because at present trial, with its winner-take-all approach, is what a court will impose if parties do not agree on an alternative. This may provide some justification for a judge or jury to impose a compromise implicitly. It can even justify similar conduct by an arbitrator because, after all, a party may choose winner-take-all arbitration as the only alternative to winner-take-all trial the other side will accept, and not in preference to EVA or some other form of imposed compromise.

be unable to afford to prepare as effectively for trial. If so, Penelope might argue thatthe arbitrator should award more than the evidence and the law suggest.

This argument has some force. It is true that the relative resources of the parties are likely to skew the results of trial. Otherwise, the substantial investments that parties make in litigation are difficult to explain. Nevertheless, a couple of responses are available.

First, Dwayne may complain of double-counting. Penelope's greater resources are likely to affect the presentation to the arbitrator, and so to take into account the disparity in resources a second time may fail to predict accurately how a real court would be likely to rule.[241]

A second and more fundamental objection to Penelope's argument is that disparities in resources should not affect the outcome of dispute resolution. They do, but that is a necessary evil in our adversarial system.[242] Courts are supposed to judge the merits of a lawsuit, not the parties before them. A natural corollary to this is that the wealth of a party should not benefit it at trial. As a result, courts should attempt to compensate for disparities in resources; they should not deliberately exacerbate them.[243] For this reason, EVA – like trial – should be designed to minimize the effect that disparities in resources have on dispute resolution.

Nevertheless, it is possible that Penelope would require Dwayne to agree that the arbitrator be instructed to award an amount that reflects her greater wealth. Dwayne may nevertheless prefer EVA to trial. And since the parties have control over the standard the arbitrator is to use, the arbitrator presumably would have to honor this decision. However, sufficient protection for a vulnerable party may come from the opposing party's lack of interest

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[241] This objection, however, does not undermine Penelope's argument completely. Relative resources may have a more profound effect at trial than in Expected Value Arbitration, as I have argued above. See infra Parts III.A and III.C.

[242] Edward Cooper, Work Product of the Rulemakers, 53 Minn.L.Rev. at 1269-74 (1969).

[243] For a similar concern see, e.g., Owen Fiss, Comment, Against Settlement, 93 Yale L.J. 1073, 1077 (1984).

in defining EVA with this degree of precision.[244] The default should be that disparities in

resources will have whatever effect on the arbitration is inevitable based on the quality of each

party's presentation of its case and no more.

In any case, arbitrators over time should be able to address these and other

considerations.[245] About some of the relevant factors arbitrators will not doubt be explicit at the

outset. About others the parties may not require clarification. Determining which considerations

count in EVA should not pose an insurmountable obstacle to its adoption.

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[244] Courts also may refuse to enforce agreements to enter EVA if they are framed in a way that is one-sided. See, e.g., Ting v. AT&T, 319 F.3d 1126, 1149-50 (9th Cir. 2003) (affirming in part refusal to enforce arbitration agreement under California law because of its "one-sidedness").

[245] Similar issues arise around other possible factors affecting the outcome in EVA. One that may have a large impact on the outcome at trial is the judge who is presiding. If the parties know a particular judge is assigned to their case, they could well make arguments about how that judge is likely to rule. This problem may not arise with great frequency. Parties may generally agree to enter Expected Value Arbitration before either side files a lawsuit and the case is assigned to a judge. Moreover, to the extent a judge has been assigned but judge shopping remains a possibility – for example, if one of the parties might file additional cases and then attempt to coordinate or consolidate the cases in a different court – the odds of the success of this strategy, too, might be taken into account. Nevertheless, in some instances the identity of the judge in a case may be known.

Taking this factor into account in calculating the expected value of a case would run counter to the fiction that judges are neutral and merely apply the law to the facts before them. Ours is supposed to be a system of the rule of law, not of men (or women). See Antonin Scalia, The Rule of Law as a Law of Rules, 5 U. Chi. L. Rev. 1187 (1989). But no experienced litigator believes this to be true. Indeed, many litigators believe that the judge is one of the most important factors in one's chances for success in litigation. Nevertheless, it is unfortunate that so much depends on which judge is presiding. Perhaps the best answer, much like with disparities in resources, is that in the interests of justice the expected value arbitrator should not predict the outcome before a particular judge, unless the parties so specify.

Another factor is the location of the litigation. The judges in a jurisdiction may tend to share a view of the law, and juries from a particular locale may have common sympathies and biases. Again, at the least, the possibility of successful forum-shopping by either party would have to be considered. And if the litigation has yet to commence, the parties might fairly debate where it might legitimately be filed.

Allowing the inclinations of judges and juries in a particular locale to inform the decision of the expected value arbitrator is somewhat less troubling than considering the propensities of a particular judge, if only because a greater cross-section of decision-makers is involved. It also may lend greater precision in predicting what a court would be likely to do. For these reasons, arbitrators should perhaps be somewhat less resistant to taking this factor into account, whether or not the parties provide explicit instructions.

VI.     Conclusion

In sum, EVA would have several attractive features.  First and foremost, it would allow parties to have an objective expert impose a fair compromise based on a prediction of what would happen in court.  This should be attractive to two, overlapping groups:  first, to disputants who wish to compromise but cannot agree on the terms of a settlement and, second, to parties who are averse to risk but want the benefit of a neutral assessment of their legal rights.  EVA may better meet the needs of these disputants than any existing form of dispute resolution, it may minimize the errors in resolving disputes, and it may encourage more desirable expenditures on litigation than trial.  For all of these reasons, EVA is an idea whose time has come.  The next step is to make it available for litigants to try it and to see how well it works.

Appendix I

The expected error costs under EVA and trial are the same, assuming the following definitions:

P = the likelihood the plaintiff is correct.
J = the likelihood the jury will apply the preponderance of evidence standard correctly.
O = the outcome if the plaintiff wins, with the only other possibility that she gets nothing.

In expected value arbitration, if the plaintiff can carry the burden of persuasion, the plaintiff will recover the outcome (O) multiplied by the likelihood the jury will decide correctly (J). The odds are P that the plaintiff is correct, in which case the error is the difference between O and the amount awarded (O x J), and the odds are 1 - P that the plaintiff is incorrect, in which case the error is the amount awarded (O x J).

In mathematical terms, if $P > .5$, $P(O - OJ) + (1 - P)(OJ) = PO + JO - 2PJO$.

In expected value arbitration, if the plaintiff cannot carry the burden of persuasion, the plaintiff will recover the outcome (O) multiplied by the likelihood that the jury will err (1 - J). The odds are P that the plaintiff is correct, in which case the error is the difference between O and the amount awarded (O x (1 - J)), and the odds are 1 - P that the plaintiff is incorrect, in which case the error is the amount awarded (O x (1 - J)).

In mathematical terms, if $P <= .5$, $P(O - O(1 - J)) + (1 - P)(O(1 - J)) = 2PJO - PO - JO + O$.

In winner-take-all adjudication, if P should win under the preponderance of evidence standard, then the plaintiff's recovery should be O. Two possibilities then exist. First, with a likelihood of P, the plaintiff will win when it should lose for an expected error of (1 - P) x O, plus the jury may err causing the plaintiff to lose, even though the plaintiff should win, for an expected error of (1 - J) x O. Second, with a likelihood of 1 - P, the plaintiff will win when it should lose for an expected error of (1 - P) x O, except when jury error cause the plaintiff to lose when it *should* lose, for a decrease in error of (1 - J) x O.

In mathematical terms, if $P > .5$, the expected error is $P((1 - P)O + (1 - J)O) + (1 - P)(((1 - P)O - (1 - J)O) = PO + JO - 2PJO$.

In winner-take-all adjudication, if P should lose under the preponderance of evidence standard, there should be no recovery. Two possibilities again exist. First, with a likelihood of P, the plaintiff will lose when it should win for an expected error of P x O, less the possibility of jury error causing the plaintiff to win when it should win, or (1 - J) x O. Second, with a likelihood of 1 - P, the plaintiff will lose when it should win for an expected error of P x O, plus jury error will cause the plaintiff to win when it *should* lose for an additional expected error of (1 - J) x O.

In mathematical terms, if $P <= .5$, the expected error is $P(PO - (1 - J)O) + (1 - P)(PO + (1 - J)O) = 2PJO - PO - JO + O$.

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Appendix II

The proof assumes the following definitions:

> P = the odds the plaintiff will win, which are the odds the plaintiff is correct.
> O = the outcome if the plaintiff should win.

Assume also that there are two possible outcomes: the plaintiff loses or recovers O.

The expected error costsfrom use of an expected value outcome are as follows:

> In EVA, the plaintiff will receive P x O.
> The odds are P that the plaintiff should win, but will receive only P x O, for expected error costs of P x (O – (P x O)).
> The odds are (1 – P) that the plaintiff should lose, but will receive P x O, for expected (1 – P) x (P x O).
> The expected error costs, then, are P x (O – (P x O)) + (1 – P) x (P x O) = P x O – $P^2$ x O + P x O – $P^2$ x O = 2 xP x O – 2 x ($P^2$ x O).

> The expected error costsin winner -take-all adjudication are:

> The odds are P x (1 – P) that the plaintiff should winbut will not win , in which case the expected error costs are P x (1 – P) x (O – 0),
> The odds are (1 – P) x (P) the plaintiff should lose but will win, in which case the expected error costs are (1 – P) x P x (O – 0).
> The expected error costs, then, are P x (1 – P) x O + (1 – P) x P x O = 2 x P x O – 2 x ($P^2$ x O).

> The expected error costs are the same for EVA and trial.

Appendix III

For purposes of this proof, the following definitions apply:

    $E$ = the error as measured by the square of the difference between the right result and the amount awarded in a case.
    $N$ = the number of different right outcomes that may occur in a case.
    $P_i$ = the likelihood that a given outcome $X_i$ is correct.
    $X_i$ = a possible right outcome in a case.
    $A$ = the award in the case.

The error for a given correct result in a case is measured as $E = P_i(A - X_i)^2$.

For all of the possible correct outcomes in a case, $E = \sum_1^N P_i(A - X_i)2$.

Setting the first derivative equal to zero to minimize errors, $\partial E/\partial A = \sum_1^N (P_i)2(A - X_i) = 0$.

This is the same as stating $\sum_1^N P_iA = \sum_1^N P_iX_i$.

$\sum_1^N P_iA = A$, so $A = \sum_1^N P_iX_i$, which is the mean of the possible right results in litigation, with each weighted by its likelihood of being right. This is the same as proportionate damages. In other words, proportionate damages will minimize errors measured as the square of the difference between the right result and the actual award in litigation.

Appendix IV

Assume litigation with two possible outcomes, O1 and O2. $O2 > O1$.

An investment of $c will correlate to a probability of $p(c)$ of O2 and a probability of $[1 - p(c)]$ of O1.

A utility of $U(x)$ is associated with a recovery of $x, which is the judgment less litigation costs.

Assume $0 < p(c) < 1$, that is, the likelihood of O2 is between 0% and 100%.

Assume $0 < c < O2 - O1$, that is, an investment in litigation is greater than $0 but less than the difference in outcomes.

Assume $U'(x) > 0$, that is, additional marginal dollars bring additional utility.

Assume $U''(x) < 0$, that is, marginal utility diminishes with each additional dollar.

Assume $p'(x) > 0$, that is, larger investments in litigation will increase a party's prospects at trial.

Assume $p''(x) < 0$, that is, marginal investments in litigation produce progressively less benefit. (This should be true on the whole, although there will be instances in which a discontinuous benefit will accrue to party from a larger investment.)

The utility to a plaintiff who in EVA who spends $c is:

$$H(c) = U\{p(c)(O2 - c) + [1 - p(c)](O1 - c)\} = U\{p(c)(O2 - O1) + (O1 - c)\}$$

The first derivative is. . .

$$H'(c) = U'\{p(c)(O2 - O1) + (O1 - c)\} [p'(c)(O2 - O1) - 1]$$

The second derivative is. . .

$$H''(c) = U''\{p(c)(O2 - O1) + (O1 - c)\} [p'(c)(O2 - O1) - 1]^2 + U'\{p(c)(O2 - O1) + (O1 - c)\}[p''(c)(O2 - O1).$$

The optimal c, which is C, follows from setting $H'(c) = 0$. The first factor—U'—is, by assumption, greater than 0. So $p'(C)(O2 - O1) - 1 = 0$. In other words, $p'(C) = 1/(O2 - O1)$.

Note also that the second factor in $H''(c) = 0$, $U' > 0$, $O2 > O1$, and $p''(c) < 0$, so $c = C$ is an optimal investment, as measured in utils in EVA (as well as in dollars).

Analogous reasoning applies to investments by risk-averse defendants.