Valuation Averaging: A New Procedure for Resolving Valuation Disputes

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Abstract

In this Article, Professor Sharfman addresses the problem of "discretionary valuation": that courts resolve valuation disputes arbitrarily and unpredictably, thus harming litigants and society. As a solution, he proposes the enactment of "valuation averaging," a new procedure for resolving valuation disputes modeled on the algorithmic valuation processes often agreed to by sophisticated private firms in advance of any dispute. He argues that by replacing the discretion of judges and juries with a mechanical valuation process, valuation averaging would cause litigants to introduce more plausible and conciliatory valuations into evidence and thereby reduce the cost of valuation litigation and increase the chance of settlement. He further argues that imposition of the valuation averaging procedure would not deprive litigants of their constitutional entitlements to due process and the right to trial by jury. Finally, he argues that valuation averaging would improve upon current law and is superior to other proposed alternatives.

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INTRODUCTION

This Article follows in the spirit of Karl Llewellyn and his fellow drafters of the Uniform Commercial Code who sought to

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transform merchant norms into law.[1] The merchant norms discussed here are the procedures that sophisticated firms contract for to resolve anticipated valuation disputes. The law proposed is a new procedure for resolving valuation disputes based on commercial valuation norms. More specifically, this Article proposes a new default valuation procedure, modeled on the algorithmic valuation clauses commonly used in the contracts of sophisticated firms, that would encourage parties to valuation disputes to introduce more plausible valuations into evidence and limit adjudicative discretion over how to resolve any remaining differences.

Part I discusses the problem of "discretionary valuation"—that courts are ill-equipped to assess expert valuation evidence and end up adopting arbitrary, unpredictable valuations that fall somewhere between the widely divergent values offered by the parties—and some of the reforms to address this problem that others have proposed. Part II, after first describing some private contractual solutions to the discretionary valuation problem, introduces "valuation averaging": a discretion-limiting, public valuation process modeled on the private examples. Part III explains how the proposed valuation averaging procedure would work in a variety of contexts and offers reasons for why it would be superior to current law and other proposed alternatives. Part IV anticipates and responds to two potential constitutional objections to valuation averaging, arguing that implementation of the proposal would offend neither due process nor the Seventh Amendment right to trial by jury.

I. THE PROBLEM OF DISCRETIONARY VALUATION

In disputes about value—of, for example, a business firm, condemned land, the collateral securing a loan, lost profits due to breach of contract, lost wages due to personal injury, a professional degree subject to equitable division, or the assets comprising a taxable estate—courts often face conflicting expert evidence supplied by the disputing parties.[2] Because the

1. On Llewellyn's efforts to codify merchant practice, see Lisa Bernstein, *Merchant Law in a Merchant Court: Rethinking the Code's Search for Immanent Business Norms*, 144 U. PA. L. REV. 1765 (1996); Douglas G. Baird, *Llewellyn's Heirs*, 62 LA. L. REV. 1287 (2002).

2. *See, e.g.*, Assocs. Commercial Corp. v. Rash, 520 U.S. 953, 959–65 (1997) (considering competing expert theories for the valuation of collateral securing a debt); Gonsalves v. Straight Arrow Publishers, Inc., No. CIV.A.8474, 1996 Del. Ch. LEXIS 144, at *24–30 (Del. Ch. Nov. 27, 1996)

parties have incentives to choose witnesses whose views they find amenable,[3] it is common for the witnesses they choose to offer widely divergent assessments of value.[4] Ill-equipped to perform valuations themselves, courts usually adjudicate valuation disputes either by adopting the valuation that seems most credible, or by choosing a compromise valuation that lies somewhere within the range of valuations that the parties place in evidence.

While the phenomenon of dueling experts is a concern for the law of evidence generally,[5] how it plays out in the valuation context is of particular interest because valuation does not require an "either/or" dichotomous outcome but instead permits the fact finder to split the difference[6]—and not necessarily equally.[7] As a judge once candidly explained:

> My final conclusion . . . is that [the company] is worth somewhere between $90 million and $100 million as a going concern, and to satisfy the people who want precision on the value, I fix the exact value of the company at the average of those, $96,856,850, which of course is a total absurdity that anybody could fix a value with that degree of precision, but for the lawyers who want me to make that fool estimate, I have just made it.[8]

(choosing between competing expert valuations in a corporate appraisal proceeding), *rev'd*, 701 A.2d 357 (Del. 1997). For general discussions of business valuation litigation, see Roger J. Dennis, *Valuing the Firm and the Development of Delaware Corporate Law*, 17 RUTGERS L.J. 1 (1985); Jay W. Eisenhofer & John L. Reed, *Valuation Litigation*, 22 DEL. J. CORP. L. 37 (1997).

3. *See* Leslie H. Miles, Jr., *Choosing a Valuation Witness: The Benefits of Credentialing by a Peer Association*, AM. BANKR. INST. J., Apr. 2002, at 34.

4. 2 DAVID DREXLER ET AL., DELAWARE CORPORATION LAW AND PRACTICE § 36.06, 36-14 (1999) ("Practice in the Chancery Court . . . has often involved wildly disparate expert valuation opinions.").

5. *See, e.g.*, Richard T. Stilwell, Kumho Tire*: The Battle of the Experts Continues*, 19 REV. OF LITIG. 193 (2000).

6. Stephen J. Leacock, *The Anatomy of Valuing Stock in Closely Held Corporations: Pursuing the Phantom of Objectivity into the New Millennium*, 2001 COLUM. BUS. L. REV. 161, 167–68 (observing that "judges are not experts in financial theory" and thus often engage in "the practice of splitting the difference"); Donald Wittman, *Lay Juries, Professional Arbitrators, and the Arbitrator Selection Hypothesis*, 5 AM. L. & ECON. REV. 61, 81 (2003) (observing that "arbitrators tend to split the difference" when awarding damages in tort cases).

7. David P. Leibowitz, *Evidence—The Key to Victory in the Battle of the Experts*, AM. BANKR. INST. J., Apr. 1996, at 15, 15 ("Contrary to cynical belief, judges [in valuation disputes] do more than split the difference and make a decision."). Parties may win or lose valuation disputes to varying degrees based on the relative quality of their expert evidence. *Id.* at 39, 43.

8. Citibank, N.A. v. Baer, 651 F.2d 1341, 1347 (10th Cir. 1980) (quoting from the district court's decision).

The inherent, factual imprecision of valuation[9] allows courts to mediate among competing valuations along a sliding scale and thus affords fact finders more discretion than they ordinarily would have in disputes where expert opinion diverges. This wide-ranging, adjudicative discretion encourages parties to take starkly self-serving evidentiary positions in order to "frame" the issue so as to have maximum effect upon outcomes.[10] Because such discretion can lead to valuations that deviate from market values[11] or are otherwise unpredictable, commentators have been critical of adjudicative discretion in valuation cases.[12] While such criticism is less pronounced for judges than for juries,[13] it still should be taken seriously. A valuation process that causes disputing parties to spend excessively on their evidentiary presentations in order to influence the fact finder's decision is both harmful to litigants and wasteful for society.

9. Legal uncertainty aside, it is well known among financial appraisers "that valuation is as much art as science and is inherently imprecise" because it is "highly sensitive to small changes in assumptions about the future." MCKINSEY & CO. ET AL., VALUATION: MEASURING AND MANAGING THE VALUE OF COMPANIES 293 (3d ed. 2000).

10. On framing effects and other cognitive biases affecting human decision making, see JUDGMENT UNDER UNCERTAINTY: HEURISTICS AND BIASES (Daniel Kahneman et al. eds., 1982); John O. Ledyard, *Public Goods: A Survey of Experimental Research*, *in* THE HANDBOOK OF EXPERIMENTAL ECONOMICS 111, 121–22 (John H. Kagel & Alvin E. Roth eds., 1995) (presenting empirical evidence). While juries are especially vulnerable to cognitive biases, judges are not immune. W. Kip Viscusi, *Do Judges Do Better?*, *in* PUNITIVE DAMAGES: HOW JURIES DECIDE 186, 206 (Cass R. Sunstein et al. eds., 2002) ("Judges are human and may reflect the same kinds of irrationalities as other individuals."); *see also* Cass R. Sunstein et al., *Assessing Punitive Damages (with Notes on Cognition and Valuation in Law)*, 107 YALE L.J. 2071, 2100–05 (1998).

11. *E.g.*, *In re* N.Y., New Haven & Hartford R.R. Co., 4 Bankr. 758 (D. Conn. 1980) (rejecting expert valuations based on market value in favor of a "reorganization value" based on the court's own notions of fairness), *aff'd*, 632 F.2d 955 (2d Cir. 1980).

12. Christopher P. Bowers, Comment, *Courts, Contracts, and the Appropriate Discount Rate: A Quick Fix for the Legal Lottery*, 63 U. CHI. L. REV. 1099, 1126–29 (1996) (criticizing the unpredictability of judicially selecting a discount rate to value lost profits in breach of contract cases); Walter J. Blum, *The Law and Language of Corporate Reorganization*, 17 U. CHI. L. REV. 565, 571 & n.9 (1950) (noting the contrast between market value and judicially determined "reorganization value" that is "fixed by experts").

13. Viscusi, *supra* note 10, at 206–07; STEPHEN M. BAINBRIDGE, CORPORATION LAW AND ECONOMICS 639–40 (2002) (conceding that "the whole process [of court valuation] is highly arbitrary" but arguing that Delaware chancellors have "significant advantages over courts of other states" because as "court[s] of equity" they "need not fear jury confusion").

To improve the accuracy and predictability of valuation litigation, scholars have suggested that courts reduce their reliance on expert opinions and instead where feasible rely more heavily or even entirely on market evidence.[14] Another proposal is to require courts performing valuations to use a statutory, market-pegged discount rate, such as the published United States Treasury rate on medium term bonds, rather than a rate offered by one of the parties' experts or chosen by the trier of fact.[15] A third suggestion is for courts more frequently to solicit and base their valuations on the opinions of court-appointed experts.[16]

All of these approaches are salutary in the sense that adopting any of them would likely improve the predictability of valuation litigation by limiting adjudicative discretion. But

14. Daniel R. Fischel, *Market Evidence in Corporate Law*, 69 U. CHI. L. REV. 941, 942–44 (2002) (urging courts to rely more on market evidence, such as the market prices of publicly traded securities, in corporate valuation disputes); Lucian Arye Bebchuk & Jesse M. Fried, *A New Approach to Valuing Secured Claims in Bankruptcy*, 114 HARV. L. REV. 2386, 2412–18 (2001) (proposing that secured claims in bankruptcy be valued through an auction of nonrecourse notes backed by the collateral securing those claims); Douglas G. Baird, *The Uneasy Case for Corporate Reorganizations*, 15 J. LEGAL STUD. 127, 136–38 (1986) (proposing that bankrupt firms be auctioned on the open market rather than valued judicially for purposes of reorganization); Mark J. Roe, *Bankruptcy and Debt: A New Model for Corporate Reorganization*, 83 COLUM. L. REV. 527, 559 (1983) (proposing that courts extrapolate the reorganization value of an insolvent firm through a judicially supervised sale of a portion of the firm on the open market); Lucian Arye Bebchuk, *A New Approach to Corporate Reorganizations*, 101 HARV. L. REV. 775, 785 (1988) (proposing to replace judicial valuation of bankrupt firms with a market-facilitating change in capital structure that would transfer a reorganizing firm's assets to its creditors, subject to call options exercisable by the firm's prior equity investors).

15. Bowers, *supra* note 12, at 1127 (proposing a statutory, fixed, or market-pegged discount rate for calculating lost profits).

16. Richard A. Posner, *The Law and Economics of the Economic Expert Witness*, 13 J. ECON. PERSP., Spring 1999, at 91, 92–96 (proposing that judges rely more frequently on economic experts of their own choosing through their power under Federal Rule of Evidence 706(a) to appoint neutral experts at the parties' expense). Judge Posner is neither the first nor the only analyst to suggest court-appointed experts as a solution to the problem of party bias in the selection of expert witnesses. *See, e.g.*, Learned Hand, *Historical and Practical Considerations Regarding Expert Testimony*, 15 HARV. L. REV. 40, 53–56 (1901); Tahirih V. Lee, *Court-Appointed Experts and Judicial Reluctance: A Proposal to Amend Rule 706 of the Federal Rules of Evidence*, 6 YALE L. & POL'Y REV. 480, 502 (1988) (concluding that increased use of court-appointed experts in complex cases would enhance efficiency). But he is the first to advocate the "court-appointed expert" approach specifically for economic expert witnesses.

none is a panacea. Market evidence cannot be used if none is available. And often it is not, particularly when the thing to be valued is not a marketable security. Moreover, even when market evidence is available, experts still might disagree on how to apply or interpret it.[17] And while encouraging courts to make greater use of market evidence would likely improve outcomes in some cases, inaccuracy and unpredictability will persist so long as some fact finders fail to heed this advice.[18]

Similarly, the proposal to peg the discount rate to a statutorily preordained market indicator such as a published Treasury rate, though likely an improvement over unfettered adjudication, nonetheless fails ultimately to solve the problem. Experts still might disagree on other substantive and methodological issues bearing on the valuation aside from the discount rate, such as on what assumptions to make about future earnings. And so long as some variables affecting the valuation stay in play, expert opinion will diverge and thus outcomes will remain difficult for litigants to predict.

Likewise, though using court-appointed experts sounds appealing, courts will likely be just as unpredictable in choosing experts as they are in performing valuations themselves.[19]

17. For example, experts could disagree on the extent to which the market price of the asset being valued reflects uncertainty about the valuation litigation itself, which the market would sensibly take into account but which would be inappropriate for the trier of fact to consider. *See* Bradford Cornell & R. Gregory Morgan, *Using Finance Theory to Measure Damages in Fraud on the Market Cases*, 37 UCLA L. REV. 883 (1990) (recognizing that changes in a firm's share price due to fraud could understate the value of shareholder losses because the share price will take into account the possibility of a future damages award).

18. For example, asset auctions have become increasingly common in bankruptcy cases, much to the satisfaction of market-oriented bankruptcy scholars. *See* Douglas G. Baird & Robert K. Rasmussen, *The End of Bankruptcy*, 55 STAN. L. REV. 751, 751–52 (2002) (citing the recent auctions in the TWA, Enron, and Polaroid cases). But under the Bankruptcy Code, such auctions are merely permitted, not required. 11 U.S.C. § 363 (2001) (permitting a bankruptcy trustee to sell property of the estate). And despite the urgings of commentators, judges can and sometimes do say "no" to proposed asset sales. *E.g.*, Comm. of Equity Sec. Holders v. Lionel Corp. (*In re* Lionel Corp.), 722 F.2d 1063 (2d Cir. 1983); *In re* Ancor Exploration Co., 30 B.R. 802 (N.D. Okla. 1983); *In re* Wilde Horse Enters., Inc., 136 B.R. 830, 841–42, 845 (Bankr. C.D. Cal. 1991); *In re* Santec Corp., 49 B.R. 59 (Bankr. D.N.H. 1985).

19. Merton H. Miller & Keith Sharfman, *The Economic Expert Witness*, 3 GREEN BAG 2d 297, 300 (2000) (doubting the ability of judges to choose economic experts). While some have suggested letting the parties' experts, rather than the judge, choose a neutral expert, see RICHARD A. POSNER, FRONTIERS OF LEGAL THEORY 405 (2001); Daniel L. Rubinfeld, *Econometrics in the Courtroom*, 85 COLUM. L. REV. 1048, 1096 (1985), the problem remains of what to do if the parties' experts fail to agree on whom to choose.

Moreover, while the law of evidence permits judges to appoint neutral experts *sua sponte*,[20] nothing requires fact finders to accept a neutral expert's opinion or prevents the parties from offering competing expert evidence. In the end, fact finders have the discretion in valuation cases to adopt any plausible value within the range defined by what the neutral and party experts have proposed.

A final objection to both the current regime of discretionary valuation and the various proposals for reform is that all of them are in apparent tension with private preferences. Open-ended, discretionary valuation is not what sophisticated parties typically opt for in their contracts. Rather, as explained more fully below, those who anticipate future valuation disputes, such as parties to a joint venture, often contract for discretion-limiting valuation procedures that determine value according to strict, algorithmic rules.[21]

The private preference for nondiscretionary valuation, as evidenced by the frequent decision of joint venturers to "opt out"[22] of the current valuation regime in favor of a contractual valuation algorithm, undermines the case for using discretionary valuation as the default valuation norm and suggests a path for reform not yet considered in the literature—at least not at a high level of generality.[23] Based on the preferences re-

20. FED. R. EVID. 706(a).

21. Examples of joint venture agreements employing such anticipatory valuation clauses include the recent Merck/Schering-Plough and Verizon/Vodafone ventures discussed *infra* in notes 25–29 and their accompanying text. For other ways of handling anticipated valuation disputes, see Deborah Minehart & Zvika Neeman, *Termination and Coordination in Partnerships*, 8 J. ECON. & MGMT. STRATEGY 191, 207–13 (1999) (comparing two commonly used anticipatory valuation approaches, the so-called "Texas auction" and "price competition" methods).

22. On opting out of public rules in favor of private dispute resolution mechanisms, see Lisa Bernstein, *Private Commercial Law in the Cotton Industry: Creating Cooperation Through Rules, Norms, and Institutions*, 99 MICH. L. REV. 1724 (2001) (presenting evidence that firms in the cotton industry contractually opt out of public rules for resolving intra-industry disputes).

23. The valuation literature does include several discretion-limiting reform proposals for particular contexts, such as corporate appraisal and tax litigation. *See* Paul Gordon, Comment, *Submitting "Fair Value" to Final Offer Arbitration*, 63 U. COLO. L. REV. 751 (1992) (proposing to limit judicial discretion in corporate appraisal litigation to an either/or choice between the parties' valuations and to forbid the imposition of compromise outcomes); Christian J. Henrich, *Game Theory and* Gonsalves*: A Recommendation for Reforming Stockholder Appraisal Actions*, 56 BUS. LAW. 697 (2001) (same); Jay A. Soled,

vealed by valuation clauses in joint venture and other sophisticated commercial agreements, I propose below a new default procedure for resolving valuation disputes—which I call "valuation averaging"[24]—that would encourage the parties to introduce more plausible and conciliatory valuations into evidence and limit discretion over how to resolve any remaining differences.

II. SOLUTIONS

A. CONTRACTUAL SOLUTIONS

1. Merck/Schering-Plough

Sophisticated contracting parties sometimes anticipate future valuation disputes and agree in advance on how to resolve them. Consider, for instance, Merck/Schering-Plough Pharmaceuticals, a recent joint venture between two pharmaceutical firms to co-market cholesterol-reducing drugs.[25] The venture agreement's termination clause establishes a procedure for valuing the venture should one party exercise its right to buy the other out upon a change in control.[26]

That procedure is as follows. In the event of a buyout triggered by a change in ownership or control of one of the venturers, each firm must retain an internationally recognized banking firm to render a fair market valuation. If the average of the valuations is within twelve percent of each individual valuation, the conclusive value for purposes of the buyout will be the average of the two valuations. If the difference between the individual valuations and their average exceeds twelve percent, a third valuation must be performed by a third bank selected by the parties (or, if they cannot agree, by the president of the New York City Bar Association). If the third bank's valuation does not fall between the first two, then the buyout valuation is the average of the third valuation and the party valuation that is closest to it. And if the third bank's valuation does fall between the first two, then the buyout valuation is the average of the third bank's valuation and any of the first two valuations that are within thirty percent of the third.[27]

2. Verizon/Vodafone

Another recent example of a contractually prescribed, algorithmic appraisal process is the dissolution clause in the partnership agreement governing Verizon Wireless, a joint venture between Bell Atlantic (which is now Verizon) and Vodafone.[28] If in the event of dissolution the partners cannot agree on the value of Verizon Wireless's assets, each must hire a qualified investment bank to perform an appraisal of the assets. If the appraisals are within ten percent of each other, their average will be the conclusive value. If the gap between them is greater than ten percent, then the original appraisers (or, if they cannot agree, the American Arbitration Association) must choose a resolving appraiser to perform an independent valuation. The conclusive value would then be the average of the resolving appraiser's valuation and the original appraisal that is closest to it.[29]

3. "Final Offer"/"Baseball" Arbitration

A third contractual solution to the discretionary valuation problem is a variant of the process known as "final offer" or "baseball" arbitration,[30] which for example was used recently in

Transfer Tax Valuation Issues, the Game Theory, and Final Offer Arbitration: A Modest Proposal for Reform, 39 ARIZ. L. REV. 283 (1997) (making a similar proposal in the tax litigation context). But none of these "final offer arbitration" proposals takes a global approach to the discretionary valuation problem, as is done here. Nor would they reduce the evaluator's discretion as significantly as would the "valuation averaging" proposal made here. On the relative limitations of final offer arbitration, see discussion *infra* Part II.A.4.

24. I would have preferred to call the proposal "value averaging," but that term is already used in the finance literature to describe a certain type of investment strategy. *See* MICHAEL E. EDLESON, VALUE AVERAGING: THE SAFE AND EASY INVESTMENT STRATEGY FOR HIGHER INVESTMENT RETURNS (1991).

25. For a redacted version of the venture agreement, see Schering-Plough Corp., SEC Form 8-K, Exhibit 99.4, at 1 (Oct. 21, 2002) (on file with the Securities and Exchange Commission), *available at* http://www.sec.gov/Archives/edgar/data/310158/000095012302009817/y64660exv99w4.txt.

26. *Id.* § 5.3(d)(i), at 68–69.

27. *Id.*

28. *See* Verizon Wireless, Inc., SEC Form S-1, No. 333-44394, Amended and Restated Partnership Agreement § 9.5, at 42–44 (Aug. 24, 2000) (on file with the Securities and Exchange Commission), *available at* http://www.sec.gov/Archives/edgar/data/1120994/000095010300000976/0000950103-00-000976-0003.txt.

29. *Id.*

30. On final offer and baseball arbitration, see Amy Farmer & Paul Pecorino, *Bargaining with Informative Offers: An Analysis of Final-Offer Arbitration*, 27 J. LEGAL STUD. 415 (1998); Stephen A. Hochman, *Provisions for Implementing a Baseball Arbitration Procedure*, 1 ALI-ABA COURSE OF STUDY 363 (1993), *available at* WL C879 ALI-ABA 363. For applications of the proc-

a joint venture called Cingular Wireless.[31] Under the so-called "final offer" approach, parties in a valuation dispute would each submit a proposed valuation to a neutral arbitrator (chosen by agreement or, if that is infeasible, by a neutral third party such as the president of the National Association of Securities Dealers) who then must adopt one of the submitted proposals. Without using averaging or any other compromise mechanism, the arbitrator must choose the most persuasive of the submitted valuations (which is to say, the one deemed closest to what the arbitrator would consider the "true" or "proper" value) as the conclusive value. Another variant of this process, known as "nighttime baseball," requires the arbitrator to arrive independently at a neutral valuation figure prior to learning what each side has offered, and then to select mechanically the party submission that is closer to the neutral figure as the conclusive value.[32]

4. Some Lessons for Public Law

Much might be learned for public law from these private contractual solutions. Valuation clauses in corporate, partnership, and joint venture agreements, such as those providing for "baseball arbitration" (as in the case of Cingular Wireless) or for an "averaging" process (as in the cases of Merck/Schering-Plough and Verizon/Vodafone), are evidence of how parties anticipating a future valuation dispute would choose ex ante, if they could do so costlessly, to have the dispute resolved.[33]

ess specifically to valuation disputes, see Jason Micah Ross, *"Baseball Litigation": A New Calculus for Awarding Damages in Tort Trials*, 78 TEX. L. REV. 439 (1999) (proposing final offer arbitration as a mechanism for calculating tort damages); Soled, *supra* note 23 (proposing a final offer-type process for resolving valuation disputes between taxpayers and the IRS); Gordon, *supra* note 23 (proposing a final offer-type process for corporate appraisal litigation); Henrich, *supra* note 23 (same).

31. *See* Cingular Wireless LLC, SEC Form S-4, No. 333-81342, Limited Liability Company Agreement § 11.3, at 37–38 (Jan. 24, 2002) (on file with the Securities and Exchange Commission), *available at* http://www.sec.gov/Archives/edgar/data/1130452/000095014402000648/g73685ex3-2.txt.

32. Charles E. Rumbaugh, *Having Trouble Getting to the Negotiation Table? Try Baseball Arbitration*, CONT. MGMT., Oct. 2002, at 48, 49 (contrasting an open, no-splitting-the-baby approach where the arbitrator must choose which disclosed offer is most reasonable with "nighttime baseball," where the arbitrator must work in the dark to find the "true" value without knowing what the parties have offered).

33. Other methods to value joint ventures are sometimes used. *See* Minehart & Neeman, *supra* note 21 (evaluating from an efficiency perspective two other types of anticipatory valuation clauses, the so-called "Texas auc-

Parties who contract for such discretion-limiting valuation processes are able to diminish (though not eliminate) the discretionary valuation problem described in Part I. Neutral evaluators operating under the baseball arbitration and averaging procedures are, unlike judges, not free to split differences between the parties in arbitrary ways. Indeed, in the case of baseball arbitration, not only the arbitrator but also the process has no ability whatsoever to impose compromise on the parties. This gives the parties powerful incentives to offer more conciliatory valuations to begin with, thereby making the final outcome less variable and settlement more likely.[34]

But the parties cannot eliminate the discretionary valuation problem entirely. Some unpredictability must remain so long as there is a plausible range of valuations from which the arbitrator can choose the neutral figure.[35] In a world where professional appraisers have margins of error ranging from fifteen to thirty percent, the parties cannot know in advance precisely what neutral value the arbitrator will select within the zone of plausibility. Hence there will always be reasonable differences that risk-averse parties might prefer to split rather than risk the harsh, either/or choice compelled by baseball arbitration.

The inherent imprecision of valuation inevitably leads to party differences no matter what valuation process is chosen. And given this reality, the averaging procedures of Merck/Schering-Plough and Verizon/Vodafone outperform baseball arbitration because they not only give the parties incentives to be conciliatory but also impose compromise among reasonably proposed but not entirely convergent alternatives.

tion"/"cake cutting"/"shotgun" approach, under which one party sets the price of the venture and the other has the option to buy or sell, and the so-called "price competition" method, whereby each venturer bids on the venture and the high bidder buys the other out). But these approaches do not generalize to situations outside the joint venture context.

34. Paul Pecorino & Mark Van Boening, *Bargaining and Information: An Empirical Analysis of a Multistage Arbitration Game*, 19 J. LAB. ECON. 922 (2001) (finding empirically in an experimental setting that the information transmitted by the parties' submitted offers in final offer arbitration lowered the dispute rate by twenty-seven percent).

35. There is what one might call a "zone of plausibility" in financial valuations, ranging anywhere from plus or minus fifteen to plus or minus thirty percent. *Compare* MCKINSEY & CO. ET AL., *supra* note 9, at 294 ("We typically aim for a valuation range of plus or minus 15%, which is similar to the range used by investment bankers."), *with* Henrich, *supra* note 23, at 706 n.45 ("Professional appraisers often have difficulty identifying v [a firm's fair value] with precision greater than plus or minus 30 percent.").

Even averaging procedures produce some uncertainty, however, because the parties ultimately cannot know in advance precisely what the neutral valuation will be.

Still, despite their shortcomings, the contractual solutions discussed above show that under current law parties can and often do commit themselves to a discretion-limiting valuation process. While the discretionary valuation problem may be especially acute in the case of joint ventures because interests in them are often nontransferable and thus lack a clear market value, there are many other situations where valuation disputes might reasonably be anticipated and a valuation procedure sensibly provided for ex ante. These include anticipatory agreements on how to calculate the value of damages for breach of contract[36] or the value of a "frozen out" minority interest in a closely held firm.[37] Even public firms might specify in their charters or bylaws valuation procedures that would govern in shareholder appraisal litigation.[38]

Yet, even though some parties can and do contract for valuation procedures in advance, it is inevitable that others will not, either because they fail to anticipate a valuation dispute or because contracting for such a contingency is too costly or otherwise infeasible.[39] A default valuation process is therefore both necessary and inevitable. A sensible (and usual) goal for public default rules is to design them so as to mimic private norms.[40] That is the theory underlying much of the Uniform

36. An alternative to contracting for a valuation procedure by which to calculate damages is to contract instead for liquidated damages. But future damages are often difficult (or impossible) to estimate ex ante, and many contracting parties choose not to try. For some contracting parties, it is easier to anticipate in advance what valuation procedures they would prefer than to anticipate a specific level of damages that would be appropriate.

37. On valuation in the context of corporate freezeouts, see 1A MARTIN LIPTON & ERICA STEINBERGER, TAKEOVERS & FREEZEOUTS § 9.07 (2003).

38. Providing for a valuation process ex ante in a firm's organizing documents would make it unnecessary for courts, as in *Gonsalves v. Straight Arrow Publishers, Inc.*, No. CIV.A.8474, 1996 Del. Ch. LEXIS 144, at *24–30 (Del. Ch. Nov. 27, 1996), *rev'd*, 701 A.2d 357 (Del. 1997), and commentators, such as Gordon, *supra* note 23, and Henrich, *supra* note 23, to struggle to find a solution to the discretionary valuation problem ex post.

39. For example, it is infeasible to agree in advance on a procedure for valuing involuntary obligations such as torts.

40. The seminal works on private norms and their relation to law are ROBERT C. ELLICKSON, ORDER WITHOUT LAW (1991), and ERIC A. POSNER, LAW AND SOCIAL NORMS (2000). Both observe that many sensible laws first originated as private norms.

Commercial Code.[41] And while there is some doubt whether the UCC accurately reflects private commercial norms,[42] one cannot doubt the wisdom of at least *trying* to draft commercial laws like the UCC with an eye toward emulating private commercial norms.

If private commercial norms are relevant for the UCC generally, then surely they are relevant for resolving valuation disputes.[43] Litigants involved in valuation disputes would likely benefit from public processes that reflect private valuation norms. If sophisticated contracting parties believe that it is sensible to resolve anticipated valuation disputes with a valuation process that involves the averaging of a neutral valuation with plausible valuations offered by the parties, then it would appear wise for courts to resolve unanticipated valuation disputes in a similar way[44]—or at least to adopt such a process as a default norm.[45]

41. *See* U.C.C. §1-102 cmt. 1 (1998) (noting the Code's openness to and evolving reflection of changing commercial practices, customs, and usages); *see also* Richard Danzig, *A Comment on the Jurisprudence of the Uniform Commercial Code*, 27 STAN. L. REV. 621, 624 (1975).

42. *See* Baird, *supra* note 1, at 1288 (arguing that "some of [Llewellyn's] specific ideas about commercial law were wrong"); Lisa Bernstein, *The Questionable Empirical Basis of Article 2's Incorporation Strategy: A Preliminary Study*, 66 U. CHI. L. REV. 710 (1999) (presenting evidence that the Code's drafters made questionable factual assumptions about private merchant practices).

43. Indeed, the UCC itself eschews court discretion on the issue of valuation, preferring to rely instead on the market. *See* U.C.C. § 9-610(a)–(b) (permitting secured creditors to sell a defaulting debtor's collateral in a "commercially reasonable disposition" in order to determine its value).

44. *Cf.* Charles J. Goetz & Robert E. Scott, *The Mitigation Principle: Toward a General Theory of Contractual Obligation*, 69 VA. L. REV. 967, 971 (1983) ("Ideally, the preformulated rules supplied by the state should mimic the agreements contracting parties would reach were they costlessly to bargain out each detail of the transaction.").

45. On contractually waivable default rules, see MICHAEL J. TREBILCOCK, THE LIMITS OF FREEDOM OF CONTRACT 121–26 (1993); Randy E. Barnett, *The Sound of Silence: Default Rules and Contractual Consent*, 78 VA. L. REV. 821 (1992); Ian Ayres & Robert Gertner, *Filling Gaps in Incomplete Contracts: An Economic Theory of Default Rules*, 99 YALE L.J. 87 (1989); Mkt. St. Assoc. Ltd. v. Frey, 941 F.2d 588, 596 (7th Cir. 1991) (Posner, J.) (explaining that the function of contractual default rules is "to give the parties what they would have stipulated for expressly if . . . they had had complete knowledge of the future and the costs of negotiating and adding provisions to the contract had been zero").

B. A PROCEDURAL SOLUTION: VALUATION AVERAGING

Consider in light of the contractual solutions described above a proposal to enact at both the state and federal levels a procedural statute[46] along the following lines:

> **Default Procedure in Substantial Valuation Disputes.** In any civil matter pending in the courts or agencies of [this state/the United States] where a monetary value is in dispute and the amount in dispute is at least $5000, unless the parties have otherwise agreed, the court or hearing officer shall on timely pretrial motion of any party: (1) require each party, after reasonable discovery, to propose a valuation for the monetary value in issue; (2) admit into evidence only those proposed valuations that are supported by credible evidence; and (3) determine the monetary value in issue in accordance with the requirements below.
>
> If the average of (i) the mean of all the admitted valuations submitted by plaintiff parties and (ii) the mean of all the admitted valuations submitted by defendant parties neither exceeds by 12% or more the lowest admitted valuation, nor is exceeded by 12% or more by the highest admitted valuation, then such average shall be the presumptive value of the monetary value in issue. Should such average deviate from the highest or lowest admitted valuation by 12% or more, then the parties (or, if they cannot unanimously agree, the court or hearing officer) shall appoint a qualified expert to perform at the parties' shared expense a neutral valuation, which the court or hearing officer shall admit if it is supported by credible evidence. If the neutral valuation is not between the highest and lowest of the other admitted valuations, then the presumptive value shall be the average of the neutral valuation and the next closest admitted valuation. If the neutral valuation is between the highest and lowest of the other admitted valuations, then the presumptive value shall be the average of (i) the neutral valuation, (ii) the mean of all the admitted valuations submitted by plaintiff parties, if that mean is not more than 30% higher than the neutral valuation, and (iii) the mean of all the admitted valuations submitted by defendant parties, if that mean is not more than 30% lower than the neutral valuation.
>
> The presumptive value shall be determined the conclusive value of the monetary value in issue, unless doing so would result in a gross miscarriage of justice.

To summarize, the proposed rule operates as a default

46. Because it is reasonably debatable whether the rules governing valuation disputes are substantively neutral, the safer course (at least at the federal level, given *Erie Railroad v. Tompkins*, 304 U.S. 64 (1938)) is to enact the proposed reform as a procedural statute rather than as a modification to the rules of procedure. By "procedural statute" I mean a law such as the Federal Arbitration Act, 9 U.S.C. §§ 1–16 (2000), which while facially procedural arguably relates to substance and therefore is enacted statutorily rather than promulgated as a rule under the Rules Enabling Act, 28 U.S.C. §§ 2071–74 (2000).

valuation process in "substantial" controversies (i.e., those in which the amount in controversy is high enough to justify the cost of retaining an expert)[47] involving parties that have not agreed in advance to an alternative valuation process. It requires each party to place in evidence a proposed valuation and then for the judge or hearing officer to rule on each valuation's admissibility.[48] If the average of (i) the mean of the admitted valuations submitted by plaintiff parties and (ii) the mean of the admitted valuations submitted by defendant parties is within twelve percent of both the highest and lowest valuations admitted, then the court must determine this average the presumptive value. If, however, there is a gap of twelve percent or more between this average and either the highest or lowest of the admitted valuations, or both, then the parties (or, if they cannot agree, the court or hearing officer) must appoint an expert to conduct a neutral valuation. The judge or hearing officer must then find the presumptive value to be (i) the average of the neutral valuation and the next closest valuation, if the neutral valuation does not fall between the highest and the lowest admitted valuation; or (ii) the average of (x) the neutral valuation, (y) the mean of the admitted valuations submitted by plaintiff parties, if that mean is not more than thirty percent greater than the neutral valuation, and (z) the mean of the admitted valuations submitted by defendant parties, if that mean is not more than thirty percent less than the neutral valuation. The presumptive value shall be the conclusive value, unless imposing that value would result in a gross miscarriage of justice, in which event the judge or hearing officer may depart from the presumption.

The proposed averaging process could be designed more simply if it were meant to apply only to two-party valuation disputes of the sort that the Merck/Schering-Plough agreement anticipates. But by first taking averages separately for plaintiff and defendant parties and only afterwards averaging plaintiff

47. The threshold amount in controversy of $5000, while somewhat arbitrary, is based upon a judgment reflected in current tax law, which requires a qualified appraisal of donated property only when the taxpayer claims a deduction in excess of $5000. I.R.S. Pub. No. 561, Determining the Value of Donated Property 8 (Rev. Feb. 2000).

48. To the extent that expert evidence is relied upon, the usual standards would apply. *See* Daubert v. Merrell Dow Pharm., Inc., 509 U.S. 579 (1993) (setting forth the standards governing expert testimony); Kumho Tire Co. v. Carmichael, 526 U.S. 137 (1999) (applying *Daubert* to economic expert testimony).

and defendant values together, the proposed process is designed to operate even in multiparty litigation, when the number of parties on each side is often unequal and averaging without first making the plaintiff/defendant distinction could unfairly skew the results.

III. ANALYSIS

A. HOW VALUATION AVERAGING WOULD WORK

Table 1 offers an illustration of how valuation averaging would work in a relatively simple situation:

Table 1. Valuation Outcomes (where Neutral Expert Valuation=100K)

		Plaintiff's Proposed Valuation (in thousands)					
		90	**100**	**110**	**120**	**130**	**140**
Defendant's Proposed Valuation (in thousands)	**60**	95	100	105	110	115	100
	70	95	90	93	96	100	85
	80	85	90	97	100	103	90
	90	90	95	100	103	107	95
	100	95	100	105	110	110	100
	110	100	105	110	115	113	105

The bold numbers on the horizontal axis represent various damages valuations that the plaintiff in a two-party tort dispute might propose, ranging in $10,000 increments from $90,000 to $140,000. The bold numbers on the vertical axis represent a similar spread of values for the defendant, ranging in $10,000 increments from $60,000 to $110,000. The neutral expert valuation in this example, should the parties need to resort to one, would be $100,000. Each of the other values on the table represents the presumptive outcome that the proposed procedure would produce for a given pair of submitted valuations. For example, if the plaintiff were to propose a valuation

of $140,000 and the defendant were to propose a valuation of $60,000, the procedure would produce an outcome of $100,000. (Since the average of the party valuations is not within twelve percent of the individually submitted valuations, and since neither party valuation is within thirty percent of the neutral valuation, the outcome is simply the neutral valuation.) If the plaintiff were to propose a valuation of $100,000 and the defendant were to propose a valuation of $90,000, the outcome would be $95,000, the average (since the submitted valuations are both within twelve percent of the average). If the plaintiff were to propose a valuation of $100,000 and the defendant were to propose a valuation of $70,000, the outcome would be $90,000. (The average of the two submitted valuations is not within twelve percent of the party valuations, but the neutral valuation is within thirty percent of both of them, so the outcome is the average of all three valuations.) If the plaintiff proposes a valuation of $110,000 and the defendant proposes a valuation of $60,000, then the outcome would be $105,000 (i.e., the average of the plaintiff's and the neutral expert's valuations; the defendant's valuation would be excluded from the calculation since it deviates from the neutral valuation by more than thirty percent). And so forth.

Suppose that through discovery each party knows in advance both the range of evidentiary options available to the other party and what the neutral expert valuation would be (assuming one is needed). What valuation would each party then likely propose? Table 1 shows that proposing certain valuations would always make the submitting party worse off than would proposing others, irrespective of what valuation the other party proposes. For example, the defendant is unambiguously worse off proposing a valuation of $110,000 than it would be proposing a valuation of $100,000, since the former choice would produce a higher outcome than the latter no matter what valuation the plaintiff proposes. Therefore, in the language of game theory,[49] the defendant's "strategy" of $100,000 "dominates" the strategy of $110,000.[50] Similarly, the defendant's $100,000 and $60,000 strategies are dominated by its $80,000 strategy, and the plaintiff's $90,000, $100,000, and $140,000

49. On game theory and its application to law, see DOUGLAS G. BAIRD ET AL., GAME THEORY AND THE LAW (1994); MARK SEIDENFELD, MICROECONOMIC PREDICATES TO LAW AND ECONOMICS (1996).

50. On "strict dominance" strategies, see BAIRD ET AL., *supra* note 49, at 11–14.

strategies are dominated by its $130,000 strategy. Table 2 illustrates the effect of these strategic dominances by shading outcomes that will never be reached because the strategic choices that they reflect are dominated by others.

Table 2. Valuation Outcomes (where Neutral Expert Valuation=100K)

Plaintiff's Proposed Valuation (in thousands)

Defendant's Proposed Valuation (in thousands)	90	100	110	120	130	140
60	95	100	105	110	115	100
70	95	90	93	96	100	85
80	85	90	97	100	103	90
90	90	95	100	103	107	95
100	95	100	105	110	110	100
110	100	105	110	115	113	105

The four nonshaded outcomes in Table 2 reflect strategies that are not strictly dominated by others ($70,000 or $80,000 for the defendant and $120,000 or $130,000 for the plaintiff). Depending on what the plaintiff does, the defendant might be better off choosing a strategy of $70,000 or $80,000. (For example, if the plaintiff proposes a valuation of $90,000, the defendant would be better off proposing a valuation of $80,000 than it would be proposing a valuation of $70,000.) It is possible, however, to narrow the range of potential outcomes still further once each party takes the other party's likely strategic behavior into account.

The plaintiff will know that the defendant will not offer a valuation of $60,000, $90,000, $100,000, or $110,000, because those strategies are strictly dominated by $80,000. Therefore, the plaintiff can choose its best strategy knowing that the defendant will propose a valuation of either $70,000 or $80,000. With this knowledge, it becomes apparent that the plaintiff's strategy of $130,000 dominates the strategy of $120,000. Similarly, the defendant will know that the plaintiff will not offer a

valuation of $90,000, $100,000, $110,000, or $140,000, because those strategies are strictly dominated by both $120,000 and $130,000. Therefore, the defendant can choose its best strategy knowing that the plaintiff will choose either $120,000 or $130,000. Knowing this, it becomes apparent that the defendant should propose a valuation of $70,000, since that strategy dominates $80,000 in the relevant range. Table 3 reflects this analysis of the parties' likely strategic interaction. All outcomes are now shaded except for one: the outcome of $100,000 generated by the plaintiff proposing a valuation of $130,000 and the defendant proposing a valuation of $70,000.

Table 3. Valuation Outcomes (where Neutral Expert Valuation=100K)

Plaintiff's Proposed Valuation (in thousands)

Defendant's Proposed Valuation (in thousands)	90	100	110	120	130	140
60	95	100	105	110	115	100
70	95	90	93	96	100	85
80	85	90	97	100	103	90
90	90	95	100	103	107	95
100	95	100	105	110	110	100
110	100	105	110	115	113	105

Table 3 illustrates that when the parties have complete knowledge of what the neutral valuation will be, they will have an incentive to offer the most advantageous valuation that is still within thirty percent of the neutral valuation. While an incentive remains to propose a valuation that self-servingly diverges from the value that a neutral expert would offer, there is also an incentive for the parties not to diverge too far, lest their valuations not be taken into account at all.

Relaxing the assumption that the parties know in advance precisely what the neutral expert's valuation would be does not significantly affect the analysis. Assume, for example, that the parties know that a neutral expert valuation would be somewhere in the range of $90,000 to $110,000. A defendant with that expectation would not submit a valuation that is more than thirty percent less than $90,000, and a plaintiff with that expectation would not submit a valuation that is more than thirty percent greater than $110,000. So even after introducing some uncertainty about the neutral valuation into the analysis, valuation averaging would still produce some degree of evidentiary convergence. Indeed, to the extent that the parties are risk averse, uncertainty about the neutral valuation could well produce even greater convergence, even to the point of bringing the parties close enough to render a neutral valuation unnecessary. Furthermore, to the extent that parties who are subject to a valuation averaging process can anticipate the evidentiary convergence and predictable outcomes that the procedure is likely to produce, mutual optimism will be reduced and they will be more likely to settle their dispute out of court.[51]

Similarly, the analysis would not change if one were to relax the assumption of two-party litigation and assume instead litigation among multiple parties. Consider, for instance, altering the previous example by adding a second plaintiff. To make its valuation relevant to the final outcome, each plaintiff would still have an incentive to submit a valuation that will generate a mean plaintiff value that is no more than thirty percent greater than the expected neutral valuation. The plaintiffs' valuations will first be averaged together (to see if, considered jointly, they fall within the thirty percent range) before any averaging with the neutral valuation takes place. So the results would not be weighted any more favorably for the multiple plaintiffs in this example than they would be for a single plaintiff in two-party litigation.

Finally, the analysis here assumes that courts in practice will rarely exercise their limited discretion to depart from the presumptive valuation in cases where imposition of the result called for by valuation averaging would produce a "gross miscarriage of justice." Since every valuation on which the presumptive valuation is based must be supported by credible evidence (i.e., each submitted valuation must be a plausible valuation in its own right), it is difficult to imagine a case in which imposition of the presumptive valuation would produce a gross miscarriage of justice. The reason for allowing the judge or hearing officer to have some theoretical degree of discretion is simply to satisfy the requirements of due process.[52] In practice, however, it is doubtful that this discretion would ever be used.

51. On the relation between party optimism and the likelihood of settlement, see RICHARD A. POSNER, ECONOMIC ANALYSIS OF LAW 571 (6th ed. 2003) (explaining that reducing divergences between the parties' expectations increases the chance of settlement); Bruce L. Hay, *Civil Discovery: Its Effects and Optimal Scope*, 23 J. LEGAL STUD. 481, 482 (1994); Steven Shavell, *Sharing of Information Prior to Settlement or Litigation*, 20 RAND J. OF ECON. 183, 183 (1989); Amy Farmer & Paul Pecorino, *Bargaining with Voluntary Transmission of Private Information: Does the Use of Final Offer Arbitration Impede Settlement?*, 19 J.L. ECON. & ORG. 64 (2003).

B. COMPARISON TO CURRENT LAW AND OTHER PROPOSED REFORMS

How does valuation averaging compare with other possible procedures? From the perspectives of fairness and efficiency, rather well.[53]

As discussed in Part I, current law leads to unpredictable outcomes in valuation litigation. Similarly situated parties might do better or worse in particular cases, depending on the whims of the fact finder. This variability of outcomes is hardly fair to valuation litigants. Nor is it efficient. Unfettered adjudicative discretion raises the stakes, makes divergent party expectations more likely, settlement less likely, and hence valuation litigation more costly. The high-cost valuation process of current law is therefore suboptimal from a Kaldor-Hicks, wealth maximization perspective[54] relative to the less costly and more predictable valuation averaging procedure proposed here.

Valuation averaging also fares well in comparison to the various proposals discussed in Part I for courts to make greater use of market evidence.[55] While attractive in theory, these proposals are not always feasible, since market evidence is often unavailable or equivocal. Experts anyway may disagree about the proper interpretation of market evidence, or about which market evidence to use.[56] Moreover, mere exhortation to rely on

52. For a discussion of how valuation averaging accommodates due process, see *infra* Part IV.B.

53. On fairness and efficiency as possible criteria of social choice, compare Louis Kaplow & Steven Shavell, *Fairness Versus Welfare*, 114 HARV. L. REV. 961, 997–98 (2001) (arguing for efficiency), with JOHN RAWLS, JUSTICE AS FAIRNESS: A RESTATEMENT (2001) (arguing for fairness).

54. For a defense of Kaldor-Hicks efficiency and wealth maximation as social choice criteria, see POSNER, *supra* note 51, at 13, 15–16.

55. *See supra* note 14 and accompanying text.

56. *E.g.*, Assocs. Commercial Corp. v. Rash, 520 U.S. 953 (1997) (considering the relative merits of using different types of market evidence—foreclosure

market evidence is something that fact finders are free to ignore, either *sub silentio* or even overtly.[57]

The proposal to specify a statutory discount rate pegged to a particular market indicator[58] similarly would fail to produce a valuation process more efficient than valuation averaging. Though pegging the discount rate would limit adjudicative discretion over one variable affecting valuations in a particular type of case (actions for lost profits due to breach of contract), other variables relevant to valuation would remain up for grabs. Outcomes would therefore remain unpredictable, though perhaps less so than under current law. In contrast, valuation averaging would enhance predictability in valuation cases by limiting adjudicative discretion over all variables rather than merely one. And furthermore, it would provide a global solution to the discretionary valuation problem rather than solve it locally for only a narrow range of cases.

The proposal that most seriously competes with valuation averaging is Judge Posner's idea of resorting to court-appointed experts with greater frequency.[59] Both approaches rely to varying degrees on neutral experts. But valuation averaging is superior from the standpoints of fairness and efficiency because it narrows the fact finder's discretion and thereby enhances predictability relatively more while relying on neutral experts and thus imposing additional costs on the parties relatively less.

More specifically, consider that under Judge Posner's proposal courts would require the parties to pay for a neutral expert in *every* valuation dispute, whereas with valuation averaging, courts would appoint neutral experts only when the parties' submitted valuations vary widely—i.e., beyond a plus or minus range of twelve percent. Total expert witness fees would therefore be higher under Judge Posner's proposal than

value, retail value, or replacement value—when valuing the collateral securing a debt).

57. Just as a judge may ignore the exhortations of commentators, so may a jury "nullify" a judge's instructions. *See* HARRY KALVEN, JR. & HANS ZEISEL, THE AMERICAN JURY 58, 116 (1966); Alan W. Scheflin & Jon M. Van Dyke, *Merciful Juries: The Resilience of Jury Nullification*, 48 WASH. & LEE L. REV. 165 (1991). True, jury nullification may occur only rarely. *See* Michael Abramowicz, *A Compromise Approach to Compromise Verdicts*, 89 CAL. L. REV. 231, 289 & n.220 (2001); Nancy S. Marder, *The Myth of the Nullifying Jury*, 93 NW. U. L. REV. 877 (1999). But one still cannot be confident that a jury instruction to rely on market evidence would necessarily be heeded.

58. *See supra* note 12 and accompanying text.

59. *See supra* note 16 and accompanying text.

they would be with valuation averaging. And furthermore, Judge Posner's proposal would result in less predictable outcomes than would valuation averaging, because unlike an averaging process based on multiple appraisals whose overall effect is to reduce outcome volatility, what a court-appointed expert might do in any given case is difficult if not impossible to predict.

Moreover, under Judge Posner's approach, the trier of fact would retain discretion to base its conclusive valuation on whatever evidence it considers most convincing, and the parties would have every incentive to submit self-serving evidence to persuade the fact finder to deviate from the neutral valuation. In contrast, valuation averaging removes discretion from the valuation process and thereby gives the parties powerful incentives to offer plausible, convergent valuations that likely would reduce the chance of needing a neutral expert altogether as well as increase the chance of settlement.

A final point in favor of valuation averaging is how it would handle the situation of a "runaway" neutral expert whose valuation falls outside the range of valuations offered by the parties. Valuation averaging would mitigate the effect of such a runaway neutral expert by averaging the neutral value with the party valuation that comes closest to it. Under Judge Posner's approach, however, the opinion of a runaway neutral expert would likely be given undue weight, since under his approach there is only judicial discretion but no automatic mechanism to mitigate the effect of such evidentiary anomalies.

IV. CONSTITUTIONAL CONCERNS

One might argue that valuation averaging would violate due process and/or the Seventh Amendment right to a jury trial. Using a valuation averaging process to determine the value of claims, liabilities, and interests in civil litigation denies litigants the chance to have valuation issues heard and determined by a neutral fact finder, which arguably offends due process.[60] Similarly, valuation averaging would deprive civil litigants of the opportunity to have the valuation elements of their claims passed on by a jury, which arguably would encroach upon the "right of trial by jury" guaranteed by the

60. On the due process entitlement to a hearing by a neutral fact finder, see Fuentes v. Shevin, 407 U.S. 67, 80–87 (1972) (holding that due process entitles debtors to a hearing before creditors may repossess their property).

Seventh Amendment.[61]

A. THE RIGHT TO A JURY TRIAL

One response to the Seventh Amendment objection is that the right to a jury trial in civil cases may extend only to the issue of liability and not to issues of valuation.[62] While the extent to which civil litigants are entitled to jury fact finding is an unsettled, developing area of the law, the trend has been toward limiting rather than expanding the jury's role.[63] Indeed, giving juries *too much* fact-finding discretion may just as much offend the Constitution as giving them too little.[64] Growing skepticism of civil juries is perhaps what led the Supreme Court to limit jury discretion over punitive damages in *BMW v. Gore*[65] and to continue to chip away at jury discretion in other cases.[66] The *BMW* ruling has led to a stream of state and federal legislation shrinking the role of juries by capping damage awards,[67] and

61. U.S. CONST. amend. VII. On the scope of the Seventh Amendment's jury trial guarantee, see Granfinanciera, S.A. v. Nordberg, 492 U.S. 33 (1989).

62. *Compare* Tull v. United States, 481 U.S. 412 (1987) (holding that the Seventh Amendment right to a jury trial extends only to liability but not to damages), *with* Feltner v. Columbia Pictures Television, Inc., 523 U.S. 340 (1998) (holding that plaintiffs in copyright infringement cases are entitled to a jury trial on the issue of damages). *See also* Colleen P. Murphy, *Judicial Assessment of Legal Remedies*, 94 NW. U. L. REV. 153, 155 (1999) ("[I]t is unclear whether the holdings in *Tull* and *Feltner* should be limited to the statutory schemes in those cases, or whether all civil penalties may be assessed by judges while all statutory damages must be assessed by juries.").

63. Consider, for example, that some states now compel parties initially to arbitrate issues that formerly were triable by jury and penalize the parties for challenging the arbitration award. *See, e.g.*, N.J. CT. C.P.R. 4:21A (compelling arbitration in certain low-value cases and requiring a party that demands a post-arbitration, de novo trial to pay some of the opposing side's attorney fees and witness costs unless the trial verdict is at least twenty percent more favorable to the requesting party than the arbitration award). Consider also that workers' compensation laws deny both workers and employers the right to a jury trial of tort claims brought by workers against their employers, yet workers' compensation schemes are nevertheless constitutional. N.Y. Cent. R.R. Co. v. White, 243 U.S. 188 (1917) (upholding New York's workers' compensation law).

64. *See, e.g.*, BMW of N. Am., Inc. v. Gore, 517 U.S. 559 (1996) (limiting jury discretion over punitive damages by requiring that punitive damages bear a reasonable relation to the underlying compensatory award).

65. *See id.* at 580.

66. *See, e.g.*, State Farm Mut. Auto. Ins. Co. v. Campbell, 123 S. Ct. 1513 (2003) (extending *BMW* to overturn on due process grounds a $145 million punitive damages award that accompanied a compensatory award of only $1 million).

67. *See Developments in the Law—The Paths of Civil Litigation*, 113 HARV. L. REV. 1752, 1783–1805 (2000) (providing an overview of state and federal legislation that has limited the role of juries).

such legislation is likely constitutional.[68] Even on the issue of compensatory damages, it has always been constitutional for judges to reduce jury awards by remittitur,[69] or to circumvent the jury entirely by granting judgment as a matter of law.[70] A statutory valuation averaging process mandating a directed verdict on valuation would thus seem to fall well within the scope of constitutionally permissible limitations on jury discretion. But even if not, valuation averaging could still be used in nonjury settings, which anyway constitute the vast majority of civil cases.

B. DUE PROCESS

The due process objection to valuation averaging is equally unpersuasive. It would have greater force if the algorithmically generated presumptive value were binding in all cases. But the valuation averaging proposal permits judicial departure from the presumptive value in cases where application of it would lead to a "gross miscarriage of justice." So long as the court at least theoretically retains discretion to depart from the presumptive value that valuation averaging would otherwise impose, due process is preserved. Similarly strong but nonbinding presumptions exist in other areas of law, such as in the presumptive but nonbinding guidelines that determine child support awards and criminal sentences.[71] These other discretion-limiting schemes so far have withstood constitutional chal-

68. Even the dissenting Justices who would have upheld the punitive award in *State Farm* apparently believed that damages-capping legislation is constitutional. *See State Farm*, 123 S. Ct. at 1527 (Ginsburg, J., dissenting) ("The large size of the award . . . in this case indicates why damage-capping legislation may be altogether fitting and proper.").

69. Dimick v. Schiedt, 293 U.S. 474, 483 (1935) (upholding the constitutionality of remittitur).

70. FED. R. CIV. P. 50(b).

71. For limitations on judicial discretion in the context of child support, see 42 U.S.C. § 667 (2002) (requiring the states to establish presumptive child support guidelines); 45 C.F.R. § 302.56(g) (2002) (limiting the circumstances in which a judge may deviate from a presumptive award generated by the guidelines). For limitations on court discretion in criminal sentencing, see 28 U.S.C. § 991 (2002) (establishing the United States Sentencing Guidelines); 18 U.S.C. § 3553(b) (2002) (permitting a judge to depart from the presumptive guidelines sentence in only limited circumstances and only to a limited extent); Koon v. United States, 518 U.S. 81 (1996) (explaining the circumstances under which a sentencing judge may depart from the guidelines).

lenge.[72] And it is difficult to see why more process is due to parties in valuation litigation than is due to criminal defendants and noncustodial parents.

Another response to the due process objection is that the proposed valuation averaging procedure, unlike valuation procedures contracted for privately, requires the court to find that each submitted valuation satisfies a minimal evidentiary standard in order for it to have any bearing on the outcome. A valuation based on "junk science" or otherwise lacking foundation would not be admitted.[73] This evidentiary threshold appears in itself to satisfy due process. Requiring the court to find that there is sufficient evidence in the record to support the ultimately adjudicated value is likely all the process that is due.

Finally, in relation to the due process objection it bears noting that legal valuation is not properly understood as a search for a single "correct" value that is epistemologically true, but rather as a choice of one plausible value from among many. If valuation litigation inevitably entails splitting the difference between factually plausible alternatives, making the split more predictable would hardly offend due process. Due process does not require arbitrariness and unpredictability, but rather is meant to reduce them.[74] And valuation averaging would do exactly that.

72. Mistretta v. United States, 488 U.S. 361, 412 (1989) (upholding the constitutionality of the Sentencing Reform Act of 1984 pursuant to which the United States Sentencing Guidelines were promulgated); P.O.P.S. v. Gardner, 998 F.2d 764, 767 (9th Cir. 1993) (holding that child support guidelines establishing presumptive but theoretically rebuttable awards do not violate due process).

73. Daubert v. Merrell Dow Pharm., Inc, 509 U.S. 579, 592–94 (1993) (limiting the admissibility of expert opinion evidence to that which is based upon "good science").

74. Consider the United States Sentencing Guidelines, which by making criminal sentencing less discretionary and more predictable are thought to enhance substantive fairness rather than undermine it. *See* 28 U.S.C. § 991(b)(1) (stating that the goals of the Sentencing Guidelines include "provid[ing] certainty and fairness in meeting the purposes of sentencing" and "avoiding unwarranted sentencing disparities among defendants with similar records"); *see also* Stephen Breyer, *The Federal Sentencing Guidelines and the Key Compromises Upon Which They Rest*, 17 HOFSTRA L. REV. 1, 132 (1988) (explaining how the Sentencing Guidelines enhance fairness); Stephen A. Saltzburg, *Due Process, History, and* Apprendi v. New Jersey, 38 AM. CRIM. L. REV. 243, 253 (2001) (suggesting that "we adopted guidelines . . . to put some controls on the unfettered discretion of judges and juries," that "unfettered discretion . . . is not consistent with basic due process values," and that "sentencing guidelines began the move toward due process").

CONCLUSION

This Article proposes the enactment of "valuation averaging" as a new default procedure for resolving valuation disputes in civil cases, modeled on similar processes often agreed to by sophisticated parties who anticipate having such disputes. Valuation averaging would require each party to submit a proposed valuation supported by credible evidence. An appropriately weighted average of these valuations would be determined the presumptive value, unless the highest or lowest of them diverges significantly from the average (i.e., by twelve percent or more). In the event of significant deviation, valuation averaging would require the parties to pay jointly for a neutral expert valuation and then have the court determine a presumptive value by averaging the neutral valuation with any of the admissible submitted valuations that are within a reasonably close range of it (i.e., thirty percent). Valuation averaging would allow courts no adjudicative discretion beyond a threshold ruling whether each submitted valuation is supported by credible evidence and an opportunity to depart from the presumptive value if imposing it would result in a gross miscarriage of justice.

Economic analysis suggests that valuation averaging would encourage parties in valuation disputes to offer into evidence valuations that are more plausible and conciliatory, as well as limit the discretion of fact finders to make arbitrary and unpredictable valuation rulings. If adopted, valuation averaging would likely reduce the cost of valuation litigation, promote evidentiary convergence, enhance the predictability of outcomes, increase the chance of settlement, and thereby improve both fairness and efficiency relative to current law. Moreover, all this could be accomplished without depriving litigants of any constitutional entitlement, such as due process or the right to a jury trial.