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Article

Resurrecting Trial by Statistics

Jay Tidmarsh[†]

Always more popular among academics than among courts, trial by statistics died on June 20, 2011. On that day, in an opinion closely divided in other regards, the Supreme Court unanimously “disapprove[d] that novel project.”¹ The notion that a court could try a representative sample of monetary claims and extrapolate the average result to the remainder of the cases was finished.

The demise of trial by statistics is a significant matter for class actions and other aggregate litigation. Most obviously, removing this method for determining damages limits the ability of a court to adjudicate a mass dispute should the cases come to trial. Consider a class action with 200 members, each cheated out of a different sum of money by a defendant’s wrong. Unless a judge can employ some simple way to determine how much each class member has lost,² the judge must preside over 200 separate trials. Granted, the trials can be limited just to damages; liability can be resolved on an aggregate basis. But 200 damages trials are still 200 trials. That number may not seem too bad, and it probably isn’t. But what if there are 20,000 victims? Few judges would want to take on that herculean task, and none could complete it. Trial by statistics allows the judge

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1. *Wal-Mart Stores, Inc. v. Dukes*, 131 S. Ct. 2541, 2561 (2011). In *Wal-Mart* the Court referred to trial by statistics as “Trial by Formula.” *Id.*

2. On occasion, a simple method exists. See *Leyva v. Medline Indus., Inc.*, 716 F.3d 510, 514 (9th Cir. 2013) (reversing a denial of class certification when the defendant’s “computerized payroll and time-keeping database would enable the court to accurately calculate damages and related penalties for each claim”); *Smilow v. Sw. Bell Mobile Sys., Inc.*, 323 F.3d 32, 40–41 (1st Cir. 2003) (reversing a denial of class certification when a computer program could calculate awards to cell-phone users allegedly overcharged for incoming calls).

to hear just a fraction of the total number of cases, making the resolution of mass disputes with varying amounts of individual damages a realistic possibility.

The reason that the Supreme Court's disapproval of trial by statistics matters, however, is not the efficient conduct of trial. Virtually every civil case settles,³ and class actions or other aggregate litigation are not exceptions to the rule.⁴ The real battle—the one that determines the value of the settlement—is whether the cases are aggregated in the first place.⁵ In a class action seeking damages, class certification usually requires the putative class representative to prove, among other things, that common issues among class members predominate and that the class action is superior to other methods for resolving the dispute.⁶ The individuality of the damages awards may defeat a

3. In the most recent year for which statistics are available, 1.2% of civil cases filed in federal court went to trial. *See* ADMIN. OFFICE OF THE U.S. COURTS, 2013 ANNUAL REPORT OF THE DIRECTOR ON THE JUDICIAL BUSINESS OF THE UNITED STATES COURTS tbl.C-4 (2013). The rate was the same during the prior year, *see* ADMIN. OFFICE OF THE U.S. COURTS, 2012 ANNUAL REPORT OF THE DIRECTOR ON THE JUDICIAL BUSINESS OF THE UNITED STATES COURTS tbl.C-4 (2012), and is a tick up from 2011 (1.1%), *see* ADMIN. OFFICE OF THE U.S. COURTS, 2011 ANNUAL REPORT OF THE DIRECTOR ON THE JUDICIAL BUSINESS OF THE UNITED STATES COURTS tbl.C-4 (2011). These numbers are generally consistent with the long-term decline in American trials. *See, e.g.*, Marc Galanter, *The Hundred-Year Decline of Trials and the Thirty Years of War*, 57 STAN. L. REV. 1255, 1256 (2005) (discussing “a long-term and gradual decline in the portion of cases that terminate in trial and a steep drop in the absolute number of trials during the past twenty years”).

4. *See* Thomas E. Willging & Shannon R. Wheatman, *Attorney Choice of Forum in Class Action Litigation: What Difference Does It Make?*, 81 NOTRE DAME L. REV. 591, 606–07 (2006) (noting that, in an empirical study of state and federal class actions, every class action that had been certified and had terminated before the end of the study had settled); *cf.* VINCE MORABITO, AUSTL. RESEARCH COUNCIL, AN EMPIRICAL STUDY OF AUSTRALIA'S CLASS ACTION REGIMES: SECOND REPORT 5 (2010) (finding that approximately 41% of class actions resolved under Australia's new class-action rules had settled, but that 100% of the resolved class actions that had been funded by third parties had settled).

5. *See* Samuel Issacharoff, *Settled Expectations in a World of Unsettled Law: Choice of Law After the Class Action Fairness Act*, 106 COLUM. L. REV. 1839, 1861 (2006) (“It is well understood that aggregation is the key to the viability of many claims routinely brought as class actions, particularly what are termed the negative value claims, in which the transaction costs of prosecuting individual actions make enforcement impossible absent aggregation.”).

6. In federal court, Federal Rule of Civil Procedure 23 specifies the conditions under which a class action may go forward. In addition to meeting all of the criteria found in Rules 23(a) and (g), a class must also meet one of the four conditions specified in Rules 23(b)(1)(A), (b)(1)(B), (b)(2), or (b)(3). Rule 23(b)(1)(A) is rarely used for damage claims. *See In re Dennis Greenman Sec. Litig.*, 829 F.2d 1539, 1545 (11th Cir. 1987). Rule 23(b)(1)(B) can involve

finding of predominance,⁷ and also puts a finding of superiority into jeopardy—for the simple reason that a case requiring 20,000 damages hearings is unlikely to be seen as a superior way to resolve a dispute. Increasingly, courts have required a putative class representative to submit a “trial plan” detailing how the case would be tried if it were certified.⁸ If the plaintiff cannot provide a workable plan to try individual damages, a court might deny class certification.⁹

This is the point at which trial by statistics was often useful. Only three reported federal cases used trial by statistics to determine damages, and two of them were reversed on appeal.¹⁰

claims for damages against a limited fund, but the criteria apply to very few monetary claims. *See* *Ortiz v. Fibreboard Corp.*, 527 U.S. 815, 832–41 (1999). Rule 23(b)(2) categorically forbids virtually any claims for monetary relief. *See Wal-Mart*, 131 S. Ct. at 2557–61. *But see id.* at 2560 (suggesting one modest potential exception to this bar). That leaves Rule 23(b)(3) as the likely source of authority for a court contemplating the certification of a class action seeking money. *See id.* at 2558 (noting that “individualized monetary claims belong in Rule 23(b)(3)”). Rule 23(b)(3) has two criteria: that “the questions of law or fact common to class members predominate over any questions affecting only individual members, and that a class action is superior to other available methods for fairly and efficiently adjudicating the controversy.”

7. *See Comcast Corp. v. Behrend*, 133 S. Ct. 1426, 1433 (2013) (holding that when the plaintiffs’ methodology failed to measure damages on a class-wide basis, predominance was not satisfied because “[q]uestions of individual damage calculations will inevitably overwhelm questions common to the class”); *Ward v. Dixie Nat’l Life Ins. Co.*, 595 F.3d 164, 180 (4th Cir. 2010) (“To be sure, individualized damage determinations cut against class certification under Rule 23(b)(3).”); *But see Smilow*, 323 F.3d at 40 (“The individuation of damages in consumer class actions is rarely determinative under Rule 23(b)(3).”).

8. *See Ross v. RBS Citizens, N.A.*, 667 F.3d 900, 905 (7th Cir. 2012) (noting that “courts’ increased use of class-action trial plans” is due to “the ‘critical need . . . to determine how the case will be tried” (quoting FED. R. CIV. P. 23 advisory committee’s note (2003))), *vacated on other grounds*, 133 S. Ct. 1722 (2013); MANUAL FOR COMPLEX LITIGATION (FOURTH) § 22.756 (2004) [hereinafter MANUAL, FOURTH] (“A trial plan . . . will help determine whether a trial will be manageable and meet all the Rule 23 certification standards.”); *id.* § 22.93 (“Judges often require the parties to submit detailed trial plans early in the case and to modify the plans as the case develops.”).

9. *See Espenscheid v. DirectSat USA, LLC*, 705 F.3d 770, 773, 777 (7th Cir. 2013) (affirming the decertification of a class action when the plaintiffs failed to offer a trial plan that could feasibly determine damages for 2341 class members).

10. *See Blue Cross & Blue Shield of N.J., Inc. v. Philip Morris, Inc.*, 178 F. Supp. 2d 198, 247–62 (E.D.N.Y. 2001), *rev’d in part on other grounds and questions certified*, 344 F.3d 211 (2d Cir. 2003) (*Blue Cross I*), *questions answered*, *Blue Cross & Blue Shield of N.J., Inc. v. Philip Morris USA Inc.*, 818 N.E.2d 1140 (N.Y. 2004) (*Blue Cross II*), *rev’d*, *Empire Healthchoice, Inc. v. Philip Morris USA Inc.*, 393 F.3d 312 (2d Cir. 2004); *In re Estate of Ferdinand*

But in a number of other cases putative class counsel put a trial-by-statistics approach into the trial plan, and the court then found that the class action was manageable enough to merit certification.¹¹ At least one of these cases trundled along toward

E. Marcos Human Rights Litig., 910 F. Supp. 1460, 1462 (D. Haw. 1995), *aff'd sub nom.* Hilao v. Estate of Marcos, 103 F.3d 767 (9th Cir. 1996); Cimino v. Raymark Indus., Inc., 751 F. Supp. 649, 653 (E.D. Tex. 1990), *rev'd in part*, 151 F.3d 297 (5th Cir. 1998). In *Blue Cross I*, the Second Circuit approved of the use of a trial-by-statistics approach to determining damages but certified the question to the New York Court of Appeals. *Blue Cross I*, 344 F.3d at 225–29. The New York Court of Appeals did not address the question, finding that the claim against the defendant failed on other grounds. *Blue Cross II*, 818 N.E.2d at 1146. As a result, the Second Circuit reversed the trial verdict on grounds unrelated to the use of trial by statistics. *Empire*, 393 F.3d 312. The Second Circuit ultimately took a negative view of trial by statistics in *McLaughlin v. Am. Tobacco Co.*, 522 F.3d 215, 231 (2d Cir. 2008).

The First Circuit also affirmed the use of an aggregate-damage approach that had some elements of trial by statistics; the district court awarded damages based on the aggregate harm suffered by the class (calculable as the difference in price between the actual and the fair market prices for certain drugs) rather than the amount of injury to each class member. *See In re Pharm. Indus. Average Wholesale Price Litig.*, 582 F.3d 156, 162, 195–98 (1st Cir. 2009); *cf. In re Chevron U.S.A., Inc.*, 109 F.3d 1016, 1019 (5th Cir. 1997) (approving the concept of sampling, but finding that the chosen plan was defective due to the failure to use a random sample).

The reception of state courts to trial by statistics has been similarly lukewarm. *See, e.g.,* *Leverence v. PFS Corp.*, 532 N.W.2d 735, 739 (Wis. 1995) (“[T]he aggregative procedure cannot be used, as it was here, in place of a party’s right to a trial”); *Scottsdale Mem’l Health Sys., Inc. v. Maricopa Cnty.*, 228 P.3d 117, 120 (Ariz. Ct. App. 2010) (permitting the use of statistical evidence to prove damages in some circumstances but holding that the trial court had failed to find that these circumstances existed).

11. The trial plans often called for dividing the cases into stages, with liability determined in a first stage and damages in a later stage. *See In re Zyprexa Prods. Liab. Litig.*, 253 F.R.D. 69, 188–91 (E.D.N.Y. 2008), *rev'd on other grounds sub nom.* UFCW Local 1776 v. Eli Lilly & Co., 620 F.3d 121 (2d Cir. 2010); *Dukes v. Wal-Mart Stores, Inc.*, 222 F.R.D. 137, 178 (N.D. Cal. 2004) (approving a trial plan involving a first-stage liability phase and a second-stage formula process for determining backpay awards, even though the plaintiffs’ briefs addressed the formula process only in the “most conclusory terms”), *aff'd*, 603 F.3d 571, 625 (9th Cir. 2010) (en banc) (noting that “a range of possibilities,” including trial by statistics, could make the case manageable), *rev'd*, 131 S. Ct. 2541 (2011); *In re Simon II Litig.*, 211 F.R.D. 86, 100 (E.D.N.Y. 2002), *vacated on other grounds*, 407 F.3d 125 (2d Cir. 2005); *In re Simon II Litig.*, 407 F.3d 125, 139–40 (declining to rule on the propriety of using trial by statistics); *see also* *Watson v. Shell Oil Co.*, 979 F.2d 1014, 1017–20 (5th Cir. 1992) (affirming class certification when trial plan included a Phase III trial of claims in small groups and using the results from these groups to “facilitate settlements”). *But see* *Augustin v. Jablonsky*, 819 F. Supp. 2d 153, 169–73 (E.D.N.Y. 2011) (rejecting a trial-by-statistics plan); *Arch v. Am. Tobacco Co.*, 175 F.R.D. 469, 493–94 (E.D. Pa. 1997) (rejecting a plan with bifurcation and trial-by-statistics elements).

a settlement that obviated the need for actually using trial by statistics.¹² In other words, the *prospect* of trial by statistics facilitated aggregation. *Wal-Mart's* rejection of trial by statistics makes mass aggregation that much more difficult to achieve due to the lack of good alternatives for trying mass damages.¹³

I come neither to praise trial by statistics nor to bury it. Part I of this Article shows that strong arguments favor trial by statistics, but equally compelling arguments lie on the other

The wavering enthusiasm for a trial-by-statistics approach can also be seen in the *Manual for Complex Litigation*. In 1995, the third edition of the *Manual* endorsed, as one trial option, a trial-by-statistics plan not unlike the *Marcos* plan. MANUAL FOR COMPLEX LITIGATION (THIRD) § 33.28 (1995). By the next edition in 2004, the *Manual* had backed off this position, noting only that a trial-by-statistics plan was possible “[a]lthough not accepted as mainstream.” MANUAL, FOURTH, *supra* note 8, § 21.5.

12. After the decision in *Watson*, 979 F.2d 1014, the parties reportedly settled while a petition for rehearing was pending. *Watson v. Shell Oil Co.*, 53 F.3d 663, 664 (5th Cir. 1994) (dismissing appeal); MANUAL, FOURTH, *supra* note 8, § 22.756 n.1401 (noting that the case settled).

13. Principal among the other tools for trying aggregated cases are bellwether trials, in which the court tries a small number of cases to generate enough information about claim value for the parties to forge a settlement, and *cy pres* relief, in which recoveries that cannot be feasibly provided to victims are instead given to a non-profit group whose interests roughly align with the victims' interests. On bellwether trials, see generally Eldon E. Fallon et al., *Bellwether Trials in Multidistrict Litigation*, 82 TUL. L. REV. 2323 (2008); Alexandra D. Lahav, *Bellwether Trials*, 76 GEO. WASH. L. REV. 576 (2008) [hereinafter Lahav, *Bellwether Trials*]. On *cy pres*, see, for example, *In re Baby Prods. Antitrust Litig.*, 708 F.3d 163, 172 (3d Cir. 2013) (“When excess settlement funds remain after claimants have received the distribution they are entitled to under the terms of the settlement agreement, there are three principal options for distributing the remaining funds—reversion to the defendant, escheat to the state, or distribution of the funds *cy pres*.”); AM. LAW INST., PRINCIPLES OF THE LAW: AGGREGATE LITIGATION § 3.07(b) (2010) (recommending the use of *cy pres* when individual damages distributions are not “economically viable” or are otherwise “impossible or unfair”). One problem with bellwether trials, which are most useful in positive-value cases, is that a court cannot use the method to resolve large numbers of cases; it must hope that a settlement—in which recoveries are negotiated rather than adjudicated—can be substituted for trial of all the claims. *Cf.* Alexandra D. Lahav, *The Case for “Trial by Formula,”* 90 TEX. L. REV. 571, 610–12 (2012) [hereinafter Lahav, *Trial by Formula*] (describing cases in which bellwether plaintiffs were used to forge an aggregate settlement). One problem with *cy pres*, which is most useful in negative-value cases, is that it may result in no recovery for victims—an even worse result for victims than the admittedly imperfect average award of trial by statistics.

For other approaches for trying a mass number of claims, none of which is a realistic panacea in most cases seeking individualized damages, see *In re Visa Check/MasterMoney Antitrust Litig.*, 280 F.3d 124, 141 (2d Cir. 2001), *overruled on other grounds by In re Initial Pub. Offerings Sec. Litig.*, 471 F.3d 24, 40 (2d Cir. 2006); MANUAL, FOURTH, *supra* note 8, § 22.93.

side. Whatever its abstract merits, trial by statistics was ultimately doomed to die because it suffered from a fatal disease: it failed to allow the parties to submit individualized proof not only on the amount of injury but also—and this was the especially damning part—on the fact of injury. Courts were unwilling to trade their long-standing insistence on proof of individual causation for the new-fangled proof of aggregated and averaged injury, regardless of how much simpler it was to adjudicate the latter issue.

That fact does not mean that trial by statistics in all forms should be abandoned. Part II suggests a modified trial-by-statistics approach that reaps many of the benefits of trial by statistics, minimizes its costs, and satisfies *Wal-Mart's* critique. The solution is to make the average award—as determined in a trial-by-statistics process—the presumptive award for each class member. The court must enter judgment for this amount in each case unless a party rebuts the presumption with individualized proof of damages.

Unlike trial by statistics, a presumptive-judgment approach gives the parties the power to contest both the fact and the quantum of injury. As Part II explains, however, a party has no incentive to do so unless the party can expect a better outcome after factoring in the costs of individual litigation. In many cases, no party will contest the presumptive judgment. In some situations, however, at least one party expects a better outcome from an individual trial, and therefore has an incentive to reject the presumptive award. Part II explores ways to limit this incentive and thus to reduce significantly the likelihood of individual trials. Although using presumptive judgments is not a panacea for all aggregated proceedings involving individualized damages, this modified trial-by-statistics approach provides a new and useful technique to resolve a large swath of complex cases.

I. THE PROS AND CONS OF TRIAL BY STATISTICS

The idea behind trial by statistics is to extrapolate the results from a sample of cases to a broader group of claims. The sample, which is randomly selected from within the group, must be of a sufficient size for the court to assume (to a specified level of confidence) that the sample accurately reflects the broader population.¹⁴ The results achieved in the sample trials

14. For a description of the process, see Michael J. Saks & Peter David

(including defense verdicts) are then averaged, and the average award is given to the unsampled members of the group.¹⁵

For example, assume a group of a hundred claims. From this group, a court would randomly select a sample of sufficient size that the court would have a strong assurance that the sample possesses the same characteristics as the larger group of claims. Let's say that this sample size is ten. The jury tries these ten claims to conclusion. Assume that the jury returns a defense verdict in one case, but also finds that five victims were injured in the amount of \$10,000 and four in the amount of \$25,000. Thus, the total amount awarded is \$150,000. The average of the ten claims is \$15,000, which is the amount that each of the ninety unsampled claimants would receive.¹⁶

There are numerous benefits to this approach, but also some significant drawbacks.

A. THE BENEFITS

Trial by statistics possesses a number of positive features. The first is better deterrence. If the sampling is done well, the court obtains a good sense of the size of the harm that the defendant has caused, and can extrapolate from the sample to ensure that the defendant is held responsible for that amount of harm—no more and no less. Thus, defendants will internalize the costs of their behavior, and will be neither underdeterred

Blanck, *Justice Improved: The Unrecognized Benefits of Aggregation and Sampling in the Trial of Mass Torts*, 44 STAN. L. REV. 815, 841–51 (1992).

15. Although the average award could be given to the individuals who compose the sample, the courts that have used trial by statistics have awarded the damages determined by the jury to claimants in the sample. See *Hilao*, 103 F.3d at 783–84 & n.9; *Cimino*, 751 F. Supp. at 653. This approach may limit the sample's incentive to invest optimally in damages issues, thus reducing the accuracy of the sample. See Robert G. Bone, *Statistical Adjudication: Rights, Justice, and Utility in a World of Process Scarcity*, 46 VAND. L. REV. 561, 587–93 (1993).

16. I choose these numbers for the sake of simplicity. If sampling actually yielded the results described in the text, the methodology might be suspect: the court should probably have sampled the low-value (\$10,000) claims and high-value (\$25,000) claims separately. See Saks & Blanck, *supra* note 14, at 844–47. In the example, I also compute the average as the arithmetic mean of the individual judgments. I discuss other ways to determine the average *infra* notes 84–87 and accompanying text.

Although I describe the trial-by-statistics process in terms of jury verdicts, I assume that the verdicts are subject to appeal and that the post-appeal values of those verdicts are used in calculating the average award. Thus, if the court of appeals reversed one of the nine plaintiff verdicts, the average would be computed with this case treated as a defense verdict.

nor overdeterred.¹⁷ The proper internalization of costs is especially important when the lack of trial by statistics would lead a court to deny the aggregation of claims due to the lack of an effective means for providing redress.¹⁸ Wrongdoers in such situations often would go undeterred.

Second, the process is less costly than one-by-one trials. In the hypothetical above, the court can dispense with ninety trials, with all their attendant costs.¹⁹ From these gains must be deducted the trial costs of any of the sampled cases that—due to their weakness or small value—would never have been tried

17. On the importance of actors internalizing the costs of their actions, see GUIDO CALABRESI, *THE COSTS OF ACCIDENTS* 144, 174–78 (1970). *See also* Alan D. Miller & Ronen Perry, *The Reasonable Person*, 87 N.Y.U. L. REV. 323, 346 n.97 (2012) (“If one is truly committed to welfare maximization, one must ensure that potential injurers internalize the costs of negligent conduct.”). For applications of this principle to trial by statistics, see Bone, *supra* note 15, at 595–98 (positing the argument before critiquing it from rights-based and process-based perspectives); Saks & Blanck, *supra* note 14, at 829–30 (analyzing the deterrence argument in terms of due process).

Professor Kaplow makes a different deterrence argument. Investigating the circumstances in which an accurate determination of damages is socially beneficial, he demonstrates that awarding the average amount of damages makes sense when defendants, “at the time they decide how to act, know only the average level of harm for the type of act they will commit but not the actual harm their act will cause.” Louis Kaplow, *The Value of Accuracy in Adjudication: An Economic Analysis*, 23 J. LEGAL STUD. 307, 313 (1994). In this situation, insisting on “greater precision *ex post*, in adjudication, is a waste of resources because information learned later cannot improve the earlier decision”; incurring the expense of proving individual damages is socially harmful because it has no deterrent effect and it costs more than providing an average award. *Id.* at 313–14. When a defendant can know *ex ante* the actual harm it will cause, then greater accuracy in damages is beneficial if the actual level of damages influences a defendant’s decision whether to take care and if the cost of determining damages is less than the gains achieved by the change in behavior. *Id.* at 314–15; *see id.* at 315 (“[A]ccuracy will be valuable when it is cheap and the effect on use of the substance would involve substantial benefits.”). For cases in which actual damages should be calculated, Professor Kaplow does not address which method of determining actual harm—the question at the heart of the trial-by-statistics debate—is best.

18. *See supra* notes 6–13 and accompanying text.

19. In the *Cimino* litigation, Judge Parker tried 169 sample cases, 160 of which required a determination of damages, before extrapolating the results to another 2220 cases. Trying the 160 damages cases took 133 days of trial time, with four judges, three magistrate judges, and two juries engaged in the process. *See Cimino*, 751 F. Supp. at 653 (“If all that is accomplished by this [trial process] is the closing of 169 cases, then it was not worth the effort and will not be repeated.”). A method even less expensive than trial by statistics would be to survey the sample rather than to conduct trials and to put the results of the surveys before the factfinder. *See* Laurens Walker & John Monahan, *Sampling Damages*, 83 IOWA L. REV. 545, 554–56 (1998) (proposing such surveys). No court has taken this additional step.

individually. With the small-value cases, however, the first argument loops back in: without a cost-effective method for deciding these cases, defendants could cause small-value harms on a large scale with impunity.²⁰

Third, under certain conditions trial by statistics can enhance accuracy—a positive feature both for those who believe that legal process should be as efficient as possible²¹ and for those who believe that procedure's role is to enforce substantive rights as perfectly as possible.²² Most evidently, trial by statistics can smooth out aberrational jury awards in individual cases.²³ Of course, enhanced accuracy is not a guarantee; it depends on a number of factors, including a homogenous and randomly selected sample of proper size,²⁴ equal incentives for

20. The argument in the text is essentially economic. It is possible to develop a process-based argument along the same lines. Although the day-in-court ideal generally disfavors the use of trial by statistics, *see infra* notes 40–41 and accompanying text, the scarcity of judicial resources and the costliness of individual litigation can legitimate trial by statistics as a matter of procedural fairness, *see* Robert G. Bone, *A Normative Evaluation of Actuarial Litigation*, 18 CONN. INS. L.J. 227, 256–59 (2011) (refining the process-based argument originally made in Bone, *supra* note 15, at 628–50).

21. From an economic viewpoint, the law should minimize the sum of harm, preventing harm, and transaction costs such as the cost of litigation. *See* CALABRESI, *supra* note 17, at 26–31. Although this objective does not necessarily require that litigation costs be kept to their minimum, doing so is usually regarded as an important goal. *See* RICHARD A. POSNER, *ECONOMIC ANALYSIS OF LAW* § 21.1 (7th ed. 2007). Litigation costs are composed of two elements: the direct costs of litigation (attorney's fees, expenses, and the like) and the costs of errors. *Id.* As a rule, there is a trade-off between accuracy and litigation expenditures; with trial by statistics, however, the arguably more accurate process, *see infra* note 23 and accompanying text, is also cheaper, *see supra* note 19 and accompanying text.

22. *See* Robert G. Bone, *The Process of Making Process: Court Rulemaking, Democratic Legitimacy, and Procedural Efficacy*, 87 GEO. L.J. 887, 934 (1999).

23. *See* Edward K. Cheng, *When 10 Trials Are Better Than 1000: An Evidentiary Perspective on Trial Sampling*, 160 U. PA. L. REV. 955, 957 (2012) (“Given the right conditions, sampling can actually produce more accurate outcomes than individualized adjudication.”); Saks & Blanck, *supra* note 14, at 835 (“By awarding that same amount to each of the remaining . . . plaintiffs, the court also does better, in terms of accuracy of award, than it would if it conducted . . . individualized trials.”).

24. *See* Saks & Blanck, *supra* note 14, at 844–47; *cf.* Cheng, *supra* note 23, at 963–65 (arguing that in some situations non-random sampling of extreme cases can provide an accurate estimate of total damages). One of the challenges in a trial-by-statistics plan is defining the group from which the sample is drawn. In *Hilao* and *Cimino*, the groups were known; they were composed of plaintiffs who had submitted claims or filed suit. *See In re Estate of Ferdinand E. Marcos Human Rights Litig.*, 910 F. Supp. 1460, 1462 & n.1 (D. Haw. 1995), *aff'd sub nom.* *Hilao v. Estate of Marcos*, 103 F.3d 767 (9th Cir. 1996);

the plaintiffs and the defendants to invest in the sample trials,²⁵ and a lack of bias by the factfinder.²⁶ At the same time, it is important to understand the nature of the accuracy argument. “Accuracy” does not mean that each and every claimant receives exactly the right amount; indeed, the likelihood is high that, when claimants’ injuries are variable, the average recovery will provide some claimants with too much recovery and others with too little.²⁷ Even if it does not increase the accuracy of individual awards,²⁸ however, trial by statistics may do a better job of determining the aggregate liability of the defendant—a fact that again loops back to the first argument on deterrence.

Fourth, in some cases trial by statistics ensures a modicum of compensation to victims when no other method would be as adequate and timely. For instance, in the absence of a plan to

Cimino, 751 F. Supp. at 652. In some class actions, the exact membership of the class may not be known, thus making the process of selecting a random sample more difficult. The difficulty is somewhat lessened by the doctrine that, when class membership is truly impossible to ascertain, a class action should not be certified. *See Marcus v. BMW of N. Am., LLC*, 687 F.3d 583, 593 (3d Cir. 2012) (“If class members are impossible to identify without extensive and individualized fact-finding or ‘mini-trials,’ then a class action is inappropriate.”).

25. *See Bone, supra* note 15, at 588–93; *cf.* David Rosenberg, *Mandatory-Litigation Class Action: The Only Option for Mass Tort Cases*, 115 HARV. L. REV. 831, 847–53 (2002) (arguing that a mandatory class action is necessary in order to equalize investment incentives between mass-tort plaintiffs and defendants).

26. *See Saks & Blanck, supra* note 14, at 847–50.

27. *See Bone, supra* note 15, at 579–84 (demonstrating that in many trial-by-statistics plans, a large number of the claimants who receive the average award will not receive an award that precisely compensates them for their losses).

28. Indeed, for reasons unrelated to trial by statistics, the process of aggregation itself can change the value of claims. *See Irwin A. Horowitz & Kenneth S. Bordens, The Consolidation of Plaintiffs: The Effects of Number of Plaintiffs on Jurors’ Liability Decisions, Damage Awards, and Cognitive Processing of Evidence*, 85 J. APPLIED PSYCHOL. 909, 914, 916 (2000) (reporting experimental data showing that the likelihood of recovery increases as more plaintiffs are aggregated but that the average damages award decreases if more than four plaintiffs are aggregated); Irwin A. Horowitz & Kenneth S. Bordens, *The Effects of Outlier Presence, Plaintiff Population Size, and Aggregation of Plaintiffs on Simulated Civil Jury Decisions*, 12 LAW & HUM. BEHAV. 209, 225–26 (1988) (reporting experimental data showing that the aggregation of claims increases the likelihood of recovery on weak claims but suppresses the value of strong claims, and that experimental juries were told of the presence of other similar victims). Aggregation may also create a litigation “premium,” partly because a defendant can settle all claims and buy global peace and partly because a risk-averse defendant will not want to try a massive case with potentially ruinous financial consequences. *Sullivan v. DB Invs., Inc.*, 667 F.3d 273, 339 & n.9 (3d Cir. 2011) (Scirica, J., concurring).

distribute damages, a court may decline to aggregate the claims,²⁹ leaving victims with no remedy. Or a court may opt for another remedial alternative, like *cy pres* relief, that extracts a payment from the defendant but still leaves the victims with no remedy.³⁰ Even aggregate settlements usually result in imperfect compensation, because the structures used to award compensation often resemble administrative schemes in which an award hinges more on a few generic factors than on a victim's unique situation.³¹ In a world of imperfect solutions, sometimes half a loaf is better than none—regardless of whether a victim's "true" entitlement is a quarter of a loaf or three-quarters.³²

The first four arguments are essentially instrumental in nature: they justify trial by statistics in terms of an improved quality of outcome. But trial by statistics also advances certain non-instrumental process values. Principal among these is equality: the process has the potential to achieve the like treatment of like cases, which is always one of the most elusive goals in a civil-justice system.³³ But it can also enhance other values such as participation, predictability, transparency, and rationality.³⁴

Finally, in limited instances trial by statistics can advance plaintiff autonomy. For instance, in *Cimino* all the plaintiffs in the larger group consented to statistical averaging if their claims were not selected as samples.³⁵ Thus, *Cimino* was able to sidestep one of the classic arguments against trial by statistics—that individual victims receive too much or too little. When all the plaintiffs consent to the process, they get exactly what they expect: a quick, efficient result, for which they are

29. See *supra* notes 6–13 and accompanying text.

30. See *supra* note 13.

31. See Mark A. Peterson, *Giving Away Money: Comparative Comments on Claims Resolution Facilities*, LAW & CONTEMP. PROBS., Autumn 1990, at 113 (comparing and analyzing different claims-resolution schemes); cf. *In re Combustion, Inc.*, 978 F. Supp. 673, 673–74 (W.D. La. 1997) (awarding compensation based on a special master's report in which awards were based on the number of points a claim had earned for factors such as distance from a toxic waste site and medical history).

32. Admittedly trial by statistics also requires a defendant to compensate some claimants who were entitled to no loaf at all; the invalid claims in the unsampled group receive the same average recovery as the valid claims.

33. For an extended examination of the equality argument, see Lahav, *Trial by Formula*, *supra* note 13, at 593–620.

34. See Saks & Blanck, *supra* note 14, at 831–32.

35. *Cimino v. Raymark Indus., Inc.*, 751 F. Supp. 649, 653 (E.D. Tex. 1990), *rev'd*, 151 F.3d 297 (5th Cir. 1998).

willing to trade an individually accurate award. Of course, this argument has limits. The quality of the information on which consent is based must be good;³⁶ it may not be possible to obtain each victim's consent in some cases; and a defendant's refusal to consent is a cross-cutting factor.

B. THE DRAWBACKS

Many of the drawbacks of trial by statistics are mirror images of the benefits, in the sense that they attack the premises underlying the supposed benefits of the process. But some of the drawbacks suggest new difficulties.

The first drawback is that, for the individual victims who receive the average award, the process almost always results in either over-compensation or under-compensation. That result is starkest for those claimants who would have been determined, after trial, to deserve no award at all. But other claimants are also likely to receive an award that they do not merit, even if the defendant ends up paying the right amount of damage in the aggregate.³⁷ Not only does this disparity raise an issue of accuracy at the microcosmic level of the individual claim, but it also raises a macrocosmic question of justice. If a legal system must correct wrongs to individuals, as adherents to theories of corrective justice hold, then correctly determining a defendant's liability *en masse* is insufficient. Rather, the linkage between a plaintiff's harm and a defendant's causal contribution to that harm is the only justification for redistribution from a defendant to a plaintiff.³⁸ Except for the sampled cases, trial by statis-

36. See Saks & Blanck, *supra* note 14, at 825 & nn.77–79 (discussing the quality of the plaintiffs' consent in *Cimino* and recognizing the need for additional analysis of the *Cimino* approach when some plaintiffs refuse to consent).

37. See *supra* note 27 and accompanying text.

38. For the argument that corrective justice demands a causal link between a defendant's wrong and a plaintiff's injury, see Ernest J. Weinrib, *Causation and Wrongdoing*, 63 CHI.-KENT L. REV. 407, 407–16 (1987); Ernest J. Weinrib, *Legal Formalism: On the Immanent Rationality of Law*, 97 YALE L.J. 949, 979–81 (1988). Modern civil-recourse theory reflects the same intuition. See John C.P. Goldberg & Benjamin C. Zipursky, *Civil Recourse Defended: A Reply to Posner, Calabresi, Rustad, Chamallas, and Robinette*, 88 IND. L.J. 569, 571 (2013) ("Absent an injury to someone, there is no tort, and even where there is an injury connected to wrongful conduct, there is still no tort unless the conduct was not merely wrongful in a generic sense, but wrongful *as to the injury victim.*"). See also John C.P. Goldberg & Benjamin C. Zipursky, *Unrealized Torts*, 88 VA. L. REV. 1625, 1641–49 (2002) (arguing that redress is required only when the defendant's conduct harms the plaintiff, not when it creates a risk of harm).

tics eliminates the proof on both sides of this connection: the defendant's causal act and the plaintiff's consequent injury.

Second, trial by statistics has practical problems that make its capacity to determine damages accurately suspect. I have already listed the principal difficulties: defining homogenous groups or subgroups to sample, selecting a proper sample size, ensuring adequate investment incentives for the plaintiffs who participate in the exemplary trials, and choosing unbiased factfinders.³⁹ If the process fails to yield a good estimate of the defendant's liability, the argument for trial by statistics collapses.

Third, for all of the unsampled cases, trial by statistics denies the plaintiffs and the defendant their right to a "day in court"—an autonomy-enhancing ideal that that is sometimes seen as the hallmark of American justice.⁴⁰ Even if the unsampled plaintiffs consent to the process,⁴¹ thus mitigating the autonomy concern for them, the same is not true for the defendant, whose ability to contest its liability to each plaintiff is sacrificed.

Relatedly, the nature of adjudication arguably demands individualized assessment of the facts of each case.⁴² This argument hinges on a contestable notion about the meaning of adjudication, and further assumes that courts cannot legitimately perform tasks other than this form of particularized dispute resolution. But at least on some views of the limits of the "judicial Power" in Article III,⁴³ there is a constitutional hook for arguing that federal courts do not have the power to order a trial by statistics.⁴⁴

39. See *supra* notes 24–26 and accompanying text.

40. See, e.g., *Martin v. Wilks*, 490 U.S. 755, 762 (1989) (noting that a court's inability to bind nonparties to a prior judgment "is part of our 'deep-rooted historic tradition that everyone should have his own day in court'" (quoting 18 CHARLES ALAN WRIGHT ET AL., *FEDERAL PRACTICE AND PROCEDURE* § 4449 (1981))), *superseded on other grounds by statute*, Civil Rights Act of 1991, Pub. L. No. 102-166, 105 Stat. 1074, *as recognized in Landgraf v. USI Film Prods.*, 511 U.S. 244, 251 (1994).

41. See *supra* notes 35–36 and accompanying text.

42. For a development of this argument, which Professor Bone calls the "methodological legitimacy objection," see Bone, *supra* note 20, at 259–65.

43. See U.S. CONST. art. III, § 1 ("The judicial Power of the United States, shall be vested in one supreme Court, and in such inferior Courts as the Congress may from time to time ordain and establish.").

44. See *Missouri v. Jenkins*, 515 U.S. 70, 126 (1995) (Thomas, J., concurring) (arguing, in the context of the federal courts' equitable powers in complex institutional-reform litigation, that the judicial power should be construed in

This same concern transmutes into a constitutional concern with a different textual anchor: that “[a] defendant in a class action has a due process right to raise individual challenges and defenses to claims, and a class action cannot be certified in a way that eviscerates this right or masks individual issues.”⁴⁵ This argument pits contrasting visions of the Due Process Clause against each other. On the one side is the view that the Clause requires cost-effective process,⁴⁶ thus justifying a trial-by-statistics approach as long as the defendant’s total liability is assessed with sufficient accuracy.⁴⁷ On the other is the view that the Clause protects a right of individual participation in litigation (except in narrow circumstances, of which trial by statistics is not one).⁴⁸ On this latter view trial by statistics is constitutionally infirm.

Another constitutional infirmity is the arguable violation of the right to jury trial in civil cases.⁴⁹ The argument is a variant

accordance with “history and tradition” and “the Framers’ design”).

45. See *Carrera v. Bayer Corp.*, 727 F.3d 300, 307 (3d Cir. 2013).

46. See *Mathews v. Eldridge*, 424 U.S. 319, 335 (1976) (noting that due process “generally requires consideration of three distinct factors”: “the private interest that will be affected”; “the risk of an erroneous deprivation of such interest through the procedures used, and the probable value, if any, of additional or substitute procedural safeguards”; and “the Government’s interest, including . . . the fiscal and administrative burdens that the additional or substitute procedural requirement would entail”); POSNER, *supra* note 21, § 21.1 (arguing that the *Mathews* balancing test instantiates the Hand Formula approach to determining the process that is due).

47. See *Hilao v. Estate of Marcos*, 103 F.3d 767, 785-87 (9th Cir. 1996) (upholding a trial-by-statistics plan by relying on the *Mathews* balancing test); *Saks & Blanck*, *supra* note 14, at 827-30 (arguing that trial by statistics meets the requirement of *Mathews*).

48. See *Carrera*, 727 F.3d at 307; *McLaughlin v. Am. Tobacco Co.*, 522 F.3d 215, 232 (2d Cir. 2008) (“When fluid recovery is used to permit the mass aggregation of claims, the right of defendants to challenge the allegations of individual plaintiffs is lost, resulting in a due process violation.”), *abrogated on other grounds* by *Bridge v. Phoenix Bond & Indem. Co.*, 553 U.S. 639, 656-58 (2008); *cf.* *Taylor v. Sturgell*, 553 U.S. 880, 893-95 (2008) (listing six exceptions to the due-process requirement that only parties can be bound by a judgment); *Richards v. Jefferson Cnty., Ala.*, 517 U.S. 793, 798 (1996) (holding that, in order to bind a person to a judgment, due process generally requires that the person be made a party to the case).

49. U.S. CONST. amend. VII (“In Suits at common law, . . . the right to trial by jury shall be preserved . . .”). Because the Seventh Amendment has never been incorporated through the Fourteenth Amendment, state courts need not afford litigants the same scope of jury-trial rights. See Robert Wilson, *Free Speech v. Trial by Jury: The Role of the Jury in the Pickering Test*, 18 GEO. MASON U. C.R. L.J. 389, 401 & n.116 (2008). Nonetheless, all but two states (Louisiana and Wyoming) have comparable if not stronger jury-trial rights. *Id.*

of the same idea: defendants have a right to have a jury decide whether it has harmed each plaintiff and, if so, the amount of the damage. Applying an average award to unsampled cases violates this right. Like the Due Process Clause, however, the Seventh Amendment can be read in different ways. On the view that the right to jury trial must adapt to modern conditions, there is no constitutional difficulty with trial by statistics; nor does a defendant have a right to insist on a jury's precise allocation of damages among victims as long as the jury gets the aggregate damages correct.⁵⁰ On the contrary view, the right to an individualized verdict concerning each victim is an essential component of the right to jury trial, and trial by statistics cannot stand.⁵¹

The idea that defendants have a right to individualized determinations of liability and damages plays into yet another doctrinal channel. In cases not premised on federal law, federal courts are constitutionally required to apply the relevant state's substantive law.⁵² If that state's law requires individualized assessments of causation and damage, then federal courts may not use trial by statistics to sidestep the requirement.⁵³

50. Cf. Lahav, *Bellwether Trials*, *supra* note 13, at 589–96 (arguing that bellwether trials do not violate the right to jury trial). See generally *Ex parte Peterson*, 253 U.S. 300, 309–10 (1920) (“New devices may be used to adapt the ancient institution [of jury trial] to present needs and to make of it an efficient instrument in the administration of justice. Indeed, such changes are essential to the preservation of the right.”). For cases finding no Seventh Amendment barrier to the use of statistical methods for determining aggregate liability, see *Schwab v. Philip Morris USA, Inc.*, 449 F. Supp. 2d 992, 1248–50 (E.D.N.Y. 2006), *rev'd on other grounds sub nom. McLaughlin*, 522 F.3d 215; *Blue Cross & Blue Shield of N.J., Inc. v. Philip Morris, Inc.*, 178 F. Supp. 2d 198, 255–59 (E.D.N.Y. 2001), *rev'd on other grounds and questions certified*, 344 F.3d 211 (2d Cir. 2003) (*Blue Cross I*), *questions answered*, 818 N.E.2d 1140 (N.Y. 2004) (*Blue Cross II*), *rev'd*, *Empire Healthchoice, Inc. v. Philip Morris USA Inc.*, 393 F.3d 312 (2d Cir. 2004); *In re Estate of Ferdinand E. Marcos Human Rights Litig.*, 910 F. Supp. 1460, 1468–69 (D. Haw. 1995), *aff'd on other grounds sub nom. Hilao v. Estate of Marcos*, 103 F.3d 767 (9th Cir. 1996).

51. See *Cimino v. Raymark Indus., Inc.*, 151 F.3d 297, 319–21 (5th Cir. 1998).

52. *Erie R.R. v. Tompkins*, 304 U.S. 64, 78 (1938).

53. The first case to accept the *Erie* argument was *In re Fibreboard Corp.*, 893 F.2d 706, 711–12 (5th Cir. 1990). See also *Cimino*, 151 F.3d at 321 (“[F]ederal courts must remain faithful to *Erie* and must maintain ‘the separation of powers between the judicial and legislative branches.’ . . . ‘The Judicial Branch can offer the trial of lawsuits. It has no power or competence to do more.’” (quoting *Fibreboard*, 893 F.2d at 711–12)). For an argument that state law did not prevent aggregate sampling and that *Erie* was therefore not offended, see *Blue Cross*, 178 F. Supp. 2d at 259–62. On appeal, the Second Cir-

A final permutation of the theme is that any changes to the requirement of individualized proof of liability and damages—for both state-law and federal-law claims—is a legislative decision, and therefore beyond the purview of a court. Insofar as a federal court is contemplating the use of trial by statistics, the Rules Enabling Act (Enabling Act) therefore stands as a barrier. The Enabling Act allows the Supreme Court to promulgate “general rules of practice and procedure,”⁵⁴ but only when those rules do not “abridge, enlarge or modify any substantive right.”⁵⁵ In *Wal-Mart* the Supreme Court observed that using trial by statistics to make class actions workable would render Rule 23 (as applied) suspect under the Enabling Act.⁵⁶ Because the point was not essential to its holding, the Court did not explain its reasoning in detail, noting only that a defendant is “entitled to litigate its statutory defenses to individual claims.”⁵⁷ By extension, a defendant has a right to contest the fact of its liability to each claimant, including the *fact* of the claimant’s injury.⁵⁸ But the Court said nothing about whether trial by statistics was a permissible means to adjudicate the *amount* of injury. Put differently, the Enabling Act prevents a federal court from certifying a class action in which the trial plan precludes a defendant from contesting the wrongfulness of its conduct toward each claimant *and* the causal connection between its conduct and each claimant’s alleged injury. Whether

cuit certified the issue of New York’s amenability to aggregate statistical proof to the New York Court of Appeals, but the Court of Appeals’ decision on another issue made it unnecessary to reach the point. *See supra* note 10.

54. 28 U.S.C. § 2072(a) (2012).

55. *Id.* § 2072(b).

56. *Wal-Mart Stores, Inc. v. Dukes*, 131 S. Ct. 2541, 2561 (2011). For a contrary argument ultimately superseded by *Wal-Mart*, see *Schwab v. Philip Morris USA, Inc.*, 449 F. Supp. 2d 992, 1271–72 (E.D.N.Y. 2006), *rev’d on other grounds sub nom.* *McLaughlin v. Am. Tobacco Co.*, 522 F.3d 215 (2d Cir. 2008).

57. *Wal-Mart*, 131 S. Ct. at 2561.

58. *Cf.* Richard A. Nagareda, *The Preexistence Principle and the Structure of the Class Action*, 103 COLUM. L. REV. 149, 156–57 (2003) (“[T]he basis for the implied delegation of bargaining power to class counsel must arise from matters that preexist the class action itself and, accordingly, that a class settlement—unlike public legislation—enjoys no general mandate to alter unilaterally the rights of class members.”). Although Professor Nagareda’s argument specifically addressed the need to settle cases on the basis of preexisting legal rights, his argument applies equally to novel methods of adjudication that alter the entitlement of class members to recovery. In a different section of *Wal-Mart*, the Court referenced elements of Professor Nagareda’s theory. *Wal-Mart*, 131 S. Ct. at 2556; *see also id.* at 2562, 2566 n.9 (Ginsburg, J., dissenting) (accepting aspects of Professor Nagareda’s theory).

it prevents a court from providing an average award to claimants when the defendant remains free to contest liability and causation is an open question.

This reading of *Wal-Mart* gets some support from the Court's recent decision in *Comcast Corp. v. Behrend*.⁵⁹ In *Behrend* the plaintiffs alleged four antitrust violations.⁶⁰ At the class certification hearing, the plaintiffs' expert presented a damages model to calculate the harm to the class as a result of these violations.⁶¹ The district court certified a class for only one of the four violations.⁶²

The Supreme Court overturned the certification order because the expert's model had been premised on the existence of four antitrust violations; it had not segregated the amount of damages arising from the single violation on which the class could proceed. That was a fatal error, for "a model purporting to serve as evidence of damages in this class action must measure only those damages attributable to [the one viable] theory."⁶³ On the other hand, the Court did not expect similar precision with regard to a model's determination of the quantum of injury: "Calculations need not be exact," as long as they are "consistent with [the] liability case."⁶⁴

59. 133 S. Ct. 1426 (2013).

60. *Id.* at 1430–31.

61. *Id.* at 1431.

62. *Id.*

63. *Id.* at 1433.

64. *Id.* (quoting ABA SECTION OF ANTITRUST LAW, PROVING ANTITRUST DAMAGES: LEGAL AND ECONOMIC ISSUES 57, 62 (2d ed. 2010)); see also *Int'l Bhd. of Teamsters v. United States*, 431 U.S. 324, 372 (1977) (stating that, when a court attempts to fashion relief for class members who were victims of past racial discrimination, the "process of recreating the past will necessarily involve a degree of approximation and imprecision" and require the court to "balance the equities of each [class member's] situation"). The same intuition can be found in lower-court decisions that refuse to condition class certification on an accurate calculation of individual damages but demand proof of the link between the defendant's conduct and class members' damages. See, e.g., *In re Urethane Antitrust Litig.*, 768 F.3d 1245, 1257 (10th Cir. 2014) ("[The defendant's] liability as to each class member was proven through common evidence; extrapolation was used only to approximate damages. *Wal-Mart* does not prohibit certification based on the use of extrapolation to calculate damages."); *In re Scrap Metal Antitrust Litig.*, 527 F.3d 517, 535 (6th Cir. 2008) (affirming class certification when "the fact of damages was a question common to the class even if the amount of damages sustained by each individual class member varied," and further noting that the court's prior decisions had "never required a precise mathematical calculation of damages before deeming a class worthy of certification" (internal quotation marks omitted)); *McLaughlin v. Am. Tobacco Co.*, 522 F.3d 215, 231 (2d Cir. 2008) ("[A]ggregate determination

Trial by statistics, of course, dispenses with proof of a causal connection for all the aggregated claims except for the sampled victims: the non-liability of the defendant to some unsampled class members is accounted for by reducing the average award.⁶⁵ While this approach may get the aggregate liability of the defendant right, it fails to allow the defendant to prove that its conduct caused no harm to a given plaintiff. The lesson of *Wal-Mart* and *Comcast* is that a class action cannot take a shortcut to avoid turning this very square corner.⁶⁶

C. SUMMARY

It is worth remembering that *Wal-Mart's* opposition to trial by statistics could be overcome by legislation, and state courts are not required to follow the Supreme Court's understanding of Rule 23.⁶⁷ Although *Wal-Mart* has effectively sealed its fate in federal court for the time being, trial by statistics remains alive in theory.⁶⁸ Perhaps that is to be expected, given that the

is likely to result in an astronomical damages figure that does not accurately reflect the number of plaintiffs actually injured by defendants and that bears little or no relationship to the amount of economic harm actually caused by defendants.”), *abrogated on other grounds by* *Bridge v. Phoenix Bond & Indem. Co.*, 553 U.S. 639, 656–58 (2008); *Newton v. Merrill Lynch, Pierce, Fenner & Smith, Inc.*, 259 F.3d 154, 191–92 (3d Cir. 2001) (“[A]ctual injury cannot be presumed, and defendants have the right to raise individual defenses against each class member.”); *In re Tel. Charges*, 500 F.2d 86, 90 (9th Cir. 1974) (“[A]llowing gross damages by treating unsubstantiated claims of class members collectively significantly alters substantive rights . . .”).

65. In the example at the start of this Section, I calculated the \$15,000 average award by including the one defense verdict out of the ten total verdicts, and dividing the total award (\$150,000 for the nine plaintiff verdicts plus \$0 for the one defense verdict) by the total number of verdicts (ten). The same outcome would result if I had added up and averaged only the nine plaintiff verdicts ($\$150,000 \div 9$, or \$16,666.67), and then reduced that average by the 90% success rate for plaintiffs ($\$16,666.67 \times .9$, or \$15,000).

66. For a case analyzing this connection between *Wal-Mart* and *Comcast*, see *Jacob v. Duane Reade, Inc.*, 293 F.R.D. 578, 595 (S.D.N.Y. 2013) (“*Comcast* brings damages to the forefront of the class certification inquiry—a holding that, when combined with [*Wal-Mart's*] discussion of trial by formula, suggests that where individualized damages questions so predominate over damages questions capable of classwide proof, certification is inappropriate and raises due process concerns for defendants.”).

67. Any federal legislation or state adoption of trial by statistics would need to answer the constitutional objections discussed *supra* notes 42–53 and accompanying text.

68. Some post-*Wal-Mart* courts have expressed their belief that trial by statistics is available in some cases. See, e.g., *Urethane Antitrust*, 768 F.3d at 1257, 1269 (noting that “*Wal-Mart* does not prohibit certification based on the use of extrapolation to calculate damages,” and further stating that the Seventh Amendment does not prohibit a pro rata reduction in class damages

arguments on both sides are strong and trial by statistics can do some very useful work. Thus far, however, the cases and commentators have not provided a roadmap that explains as a practical matter how judges can navigate around *Wal-Mart's* imposing roadblock.

Although the issue is close, trial by statistics in its present form deserves its fate. Despite the caselaw and academic literature that have argued for compensation based on risk as a means to achieve optimal deterrence,⁶⁹ denying defendants the ability to submit evidence tending to disprove that their conduct caused harm to a specific claimant remains a bridge too far under present American law.

But that fact does not end the matter. When arguments lie in close equipoise, there often exists a mediating solution that captures many of an idea's benefits while sidestepping

when a jury awarded less than the expert's statistical model suggested because a defendant "has no interest in the method of distributing the aggregate damages award among the class members"); *Balasanyan v. Nordstrom, Inc.*, 294 F.R.D. 550, 572 (S.D. Cal. 2013) (finding that the use of a survey to establish damages did not violate *Wal-Mart* or the defendant's due-process rights); *Alcantar v. Hobart Serv.*, No. ED CV 11-1600 PSG (SPx), 2013 WL 146323, at *4-5 (C.D. Cal. Jan. 14, 2013) (noting that *Wal-Mart* was inapplicable when the calculation of wage-and-hour penalties did not require individualized determinations); see also *Brown v. Wal-Mart Stores, Inc.*, No. 5:09-CV-03339-EJD, 2012 WL 5818300, at *3 (N.D. Cal. Nov. 15, 2012) (collecting cases refusing to permit a trial-by-statistics approach after *Wal-Mart*); *United States v. City of New York*, 276 F.R.D. 22, 37 (E.D.N.Y. 2011) ("[T]he court must look to the underlying substantive law to determine whether the proposed method of classwide proof prevents the party opposing class certification from asserting its substantive rights."). Commentators also continue to make normative arguments favoring the process. See *Bone*, *supra* note 20, at 230 (analyzing the argument from various normative perspectives and concluding that, even after *Wal-Mart*, "there is still room left for sampling in future cases"); *Cheng*, *supra* note 23 (grounding the argument in accuracy); *Lahav*, *Trial by Formula*, *supra* note 13 (grounding the argument in equality).

69. For some of the leading academic commentary, see Joseph H. King, Jr., *Causation, Valuation, and Chance in Personal Injury Torts Involving Pre-existing Conditions and Future Consequences*, 90 YALE L.J. 1353 (1981); Glen O. Robinson, *Probabilistic Causation and Compensation for Tortious Risk*, 14 J. LEGAL STUD. 779, 781-83 (1985); David Rosenberg, *The Causal Connection in Mass Exposure Cases: A "Public Law" Vision of the Tort System*, 97 HARV. L. REV. 849, 855 (1984). The best-known judicial instance of substituting liability based on risk for liability based on causation is market-share liability. See *Sindell v. Abbott Labs.*, 607 P.2d 924, 936-38 (Cal. 1980) (making manufacturers responsible for their share of the product market when the products are identical and the plaintiffs, through no fault of their own, cannot prove which manufacturer's product caused harm). *But see* *Hamilton v. Beretta U.S.A. Corp.*, 750 N.E.2d 1055, 1066-68 (N.Y. 2001) (holding that the market-share theory did not apply to manufacturers of handguns).

many of its weaknesses. The following section describes a practical and defensible middle ground for trial by statistics.

II. PRESUMPTIVE JUDGMENTS

If the central and ultimately fatal flaw of trial by statistics is its failure to permit unsampled plaintiffs or defendants to contest the average award in a particular case, then the only way to realize the benefits of the process is to nudge the parties voluntarily to accept the average award. The simplest way to do so is to establish a presumption that the average award (determined according to appropriate sampling practices) applies to every unsampled case. Any plaintiff can overcome the presumption by submitting evidence that her individual award exceeds the presumptive judgment. The defendant can overcome the presumption by submitting evidence that the plaintiff in question deserves less than the presumptive judgment—either by raising individual issues that would eliminate liability altogether (such as causation or an applicable defense) or by showing that the plaintiff's damages are less than the presumption. When a party challenges the award, the other party may introduce evidence to the contrary. As soon as either party challenges the award, the presumption collapses.⁷⁰ The court must use ordinary adjudicatory methods to determine the liability of the defendant to that individual plaintiff and the damages (if any).

To be clear, the proposal breaks no new ground for the use of trial by statistics. The presumptive judgment is not an option for every aggregated case. It should not be available when another method for calculating damages is more cost-effective.⁷¹

70. The “bursting bubble” theory of presumptions is originally associated with Professors Thayer and Wigmore. See 21B CHARLES ALAN WRIGHT & KENNETH W. GRAHAM, JR., FEDERAL PRACTICE AND PROCEDURE §§ 5121, 5122.1, 5126 (2d ed. 2005) (discussing the “bursting bubble”); cf. FED. R. EVID. 301 (requiring a party against whom a presumption is directed in a civil case to produce evidence to rebut the presumption but keeping the burden of persuasion on whichever party originally bore it).

71. In some cases, such a simple method exists. See *supra* note 2 and accompanying text; see also *George v. Nat'l Water Main Cleaning Co.*, 286 F.R.D. 168, 181–82 (D. Mass. 2012) (holding that trial-by-statistics concerns were not implicated when the defendant had a uniform wage policy and individual damages could be calculated by “reconstructing the correct wage algorithm”).

Of course, the argument for trial by statistics is often made at the start of the case, in conjunction with a class-certification motion and before the defendant has sunk any costs into the case. See *supra* notes 5–13 and accompanying text. If the presumptive-average approach is used to convince a court to certify a class action in which the social benefits of the class action are lower than its costs, then the approach does more harm than good. I proceed on the

Likewise, the alleged victims may be insufficiently homogenous or insufficiently identifiable to justify sampling.⁷² Even when an aggregated case is a good candidate for sampling, the process must be carried out with scientific rigor, and the results must be of sufficient quality to justify the court's extrapolation of the average award to the unsampled cases.⁷³ Only when sampling can reliably determine the aggregate amount of the defendant's liability to the plaintiffs may trial by statistics be used.

The effect of this proposal is to put trial by statistics, as modified, back into a judge's case-management toolbox. This Part considers the mechanics of presumptive judgments and the steps needed to avoid gamesmanship by the parties in their use of the process. It then evaluates the resulting system in light of the arguments for and against trial by statistics that Part I described.

A. HOW PRESUMPTIVE JUDGMENTS WORK

The critical problem for presumptive judgments is to get both parties to accept the presumptive award when either party can collapse the presumption so easily. For instance, if the presumptive award is \$15,000, it is evident that a plaintiff who expects to receive only \$5000 from an individual trial would jump at the presumptive award, but a rational defendant would want to challenge the award. The opposite is true when the plaintiff expects a \$25,000 recovery in an individual trial; the defendant would be thrilled to escape with a \$15,000 payment, but the plaintiff will push for a full recovery. It appears that

assumptions that presumptive averaging is the least expensive way to determine damages *and* that the social gains from a class action adopting this approach exceed the costs. *See* FED. R. CIV. P. 23(b)(3) (permitting class certification only when, among other requirements, the "class action is superior to other available methods for fairly and efficiently adjudicating the controversy"); *cf.* Jay Tidmarsh, *Superiority As Unity*, 107 NW. U. L. REV. 565 (2013) (arguing that class actions should be certified only when they yield a net social benefit).

72. *See supra* note 24 and accompanying text.

73. *See* Saks & Blanck, *supra* note 14, at 841–51. For a general discussion of some of the issues involved in sampling and the use of statistics, see FED. JUDICIAL CTR. & NAT'L RESEARCH COUNCIL, REFERENCE MANUAL ON SCIENTIFIC EVIDENCE 211–502 (3d ed. 2011) [hereinafter REFERENCE MANUAL]. *See also* Joseph B. Kadane, *Probability Sampling in Litigation*, 18 CONN. INS. L.J. 297, 299–303 (2011) (describing the use of statistical sampling in various cases).

the only cases that presumptive averaging will eliminate are those that, by coincidence, are worth exactly \$15,000.

Presumptive averaging, however, takes advantage of the reality that the party wishing to rebut the presumption must incur costs to do so. If it will cost a person \$20,000 to contest the presumption and the effort can be expected to effect only a \$10,000 change in the award, then the economically rational response is to accept the presumptive award.⁷⁴ More generally, if X equals the presumptive judgment, $C_{.1}$ equals the costs to the plaintiff of proving that award,⁷⁵ and $C_{.2}$ equals the costs to the plaintiff of proving that the plaintiff is entitled to individual judgment $P \times L$, then the plaintiff will accept the presumptive judgment X as long as

$$X - C_{.1} > (P \times L) - C_{.2},$$

and will challenge the judgment when

$$X - C_{.1} < (P \times L) - C_{.2}.$$

Another way to express the same idea is that a plaintiff will challenge the presumptive award only when the net expected award from an individual trial is greater than the net presumptive award; otherwise, the plaintiff will not.⁷⁶

The converse proposition is true for the defendant. If it will cost a defendant \$20,000 to contest the presumptive \$15,000 judgment, then the economically rational defendant will simply pay the award. More generally, if X equals the presumptive judgment, $C_{.1}$ equals the cost of providing a plaintiff with this

74. I loosen this assumption to account for repeat players. See *infra* Part II.B.3.

75. These costs will arise from various sources. For instance, some portion of the expenses for trying the sample cases may be spread across the unsampled cases. In addition, attorney's fees and case-specific expenses may also be deducted from the presumptive award. Cf. *Boeing Co. v. Van Gemert*, 444 U.S. 472, 479–82 (1980) (affirming the use of a common-fund approach to pay class counsel's fee out of the fund from which class members are compensated).

76. On the assumption that a plaintiff is risk-neutral, the plaintiff's net expected recovery in an individual lawsuit is determined by the familiar formula $(P \times L) - C$, where P represents the probability of recovery, L the amount of the recovery, and C the costs incurred by the plaintiff in prosecuting the case. See POSNER, *supra* note 21, § 21.1 (describing this calculus in the context of the Due Process Clause); Steven Shavell, *Suit, Settlement, and Trial: A Theoretical Analysis Under Alternative Methods for the Allocation of Legal Costs*, 11 J. LEGAL STUD. 55, 57 (1982) (discussing how risk-neutral parties make decisions about filing or maintaining a lawsuit based on expected value, "discounting possible outcomes by their probabilities"). I discuss the effect of a plaintiff's different preferences for risk (in other words, being a risk taker or being risk-averse) on the plaintiff's decision to challenge the presumption *infra* notes 116–119 and accompanying text.

award,⁷⁷ and $C_{.2}$ equals the costs to the defendant of proving that a plaintiff is entitled to individual award $P \times L$, then the defendant will pay the presumptive award X as long as

$$X + C_{.1} < (P \times L) + C_{.2},$$

and will challenge the award when

$$X + C_{.1} > (P \times L) + C_{.2}.$$

Put differently, a defendant will challenge the presumptive judgment only when the expected payment from an individual trial, inclusive of litigation costs, is lower than the gross amount of the presumptive award plus the cost of providing this compensation;⁷⁸ otherwise, the defendant will not.⁷⁹

Therefore, the extent of the parties' mutual willingness to accept the presumptive award is essentially defined by the size of their litigation costs in individual trials. For instance, assume that there are one hundred cases, and that random sampling of ten cases provides statistically valid information about the remainder. The average award of these ten trials is \$15,000, which then becomes the presumptive award to all class members. Plaintiffs who opt for the award will receive a net amount of \$12,000 (after deduction of \$3000 to account for their pro rata share of expenses and fees in the sampled trials). The defendant will spend \$1000 investigating each unsampled case and making the payment to plaintiffs who opt for the award. The expenses of an individual damages trial would be \$10,000 apiece for the plaintiff and defendant. Finally, assume that, of the ninety unsampled cases, twelve would involve expected recoveries between \$0 and \$5999; twenty between \$6000 and \$12,000; forty between \$12,001 and \$18,000, fifteen between \$18,000 and \$22,000, and three above \$22,000.

77. These costs are likely to be minimal. They include the cost of evaluating a plaintiff's claim to see if the presumptive award should be challenged (even though it ultimately is not), as well as the administrative cost of making the payment itself.

78. Unlike the plaintiff, the defendant is unconcerned with the net average recovery ($X - C_{.1}$) because it pays the gross amount of the award (X) to each plaintiff who accepts the presumptive judgment. The defendant has also already expended money in the litigation process that culminated in the sampling trials and the calculation of the presumptive award, but at this point those are sunk costs. The defendant's goal now is to minimize future costs.

79. If a defendant is risk-neutral, the maximum that the defendant would be willing to pay a plaintiff in an individual lawsuit is $(P \times L) + C_{.}$, where $C_{.}$ represents the costs incurred by the defendant in defending the case. For a discussion of the influence of risk preferences on the defendant's decision to either pay the presumptive judgment or fight it, see *infra* notes 116–119 and accompanying text.

In these circumstances, the defendant has an incentive to contest the presumptive award in the twelve cases with the lowest value;⁸⁰ conversely, the three plaintiffs with the highest-value claims also have an incentive to reject the presumptive judgment.⁸¹ A presumptive-judgment approach does not eliminate all trials; on the hypothetical numbers that I have provided, fifteen cases will be litigated individually, in addition to the ten cases that were randomly sampled. But the process cuts out at least seventy-five trials.⁸²

Of course, the numbers that I have used are highly stylized, intended to show the operation of the presumption.⁸³ The following section raises a series of real-world difficulties with presumptive judgments, and then suggests solutions to remedy them.

B. FIVE PRACTICAL PROBLEMS

The presumptive-judgment approach assumes that the parties are rational economic actors who act to maximize their own welfare. But the parties may not act rationally; or in acting rationally to advance their own self-interest, they may not act in a way most conducive to society's best interests. This section explores a series of circumstances in which one or the other of these circumstances pertains. It begins, however, with a more

80. In the lowest-value cases, the value of $X + C_{.1}$ (\$15,000 plus \$1000) exceeds the value of $(P \times L) + C_{.2}$ (a maximum of \$5999 plus \$10,000). Because opting for the presumptive award is therefore more expensive than individual litigation, the defendant will litigate.

81. In the highest-value cases, the value of $X - C_{.1}$ (\$15,000 less \$3000) is lower than the value of $(P \times L) - C_{.2}$ (a minimum of \$22,001 less \$10,000). Because opting for the presumptive award is therefore less advantageous to these claimants than individual litigation, the highest-value plaintiffs will litigate.

82. In the end, it may not be necessary to conduct all fifteen trials. As more trials are conducted, the parties will obtain more precise information about the value of the claims and may then be able to settle some of the contested cases. For those cases that require trial, appointing a special master to preside over the trials is an option that would limit the burden on the judiciary. See FED. R. CIV. P. 53(a)(1)(B)(ii) (authorizing a court to appoint a master to "resolve a difficult computation of damages").

83. Indeed, a full model would treat $P \times L$ and the other variables as a distribution (assigning to certain outcomes certain probabilities) rather than a single number. See Samuel Issacharoff, *Assembling Class Actions*, 90 WASH. U. L. REV. 699, 718 n.92 (2013). In deciding whether to accept a presumptive award, however, a party would still likely reduce this distribution to a single number.

technical issue involving the calculation of the presumptive award.

1. Outlier Verdicts and the Presumptive “Average”

In the last section I assumed that the presumptive average was \$15,000, but I did not explain how the court should calculate that figure. In the classic form of trial by statistics, the average is determined by including all the verdicts—including defense verdicts (which are assigned a value of \$0) and high-value verdicts. With presumptive averaging, however, the parties have an incentive to try the unsampled cases in which the costs of trial for them are less than the marginal gain from their expected recovery in relation to the presumptive average. The random sample may include some of the same type of “outlier” claims. Because these outlier claims would be tried in any event, an argument can be made not to include these verdicts when calculating the presumptive average.

In concrete terms, assume that we expect the cost of an individual trial to each side to be \$10,000, and that the ten sample trials yield one defense verdict, two verdicts of \$13,000, four of \$15,000, two of \$17,000, and one of \$50,000. In the classic form of trial by statistics, all the verdicts are thrown together, for an average of \$17,000. Had they been unsampled cases, however, two of these claims were likely to have been tried under a presumptive-averaging process: the defense verdict and the \$50,000 claim. If we exclude these claims in calculating the mean, then the average verdict of the remaining eight claims is \$15,000.⁸⁴

In a world of perfect information, the correct approach is to exclude the outlier claims in determining the presumptive average; then defendants pay the amount of compensation that exactly matches the harm they cause. But courts do not possess perfect information. They do not know, for instance, exactly what the costs of trying the unsampled cases will be (a figure that I assumed to be \$10,000 for each party). Without that basic datum, a court cannot know precisely which cases to include or exclude. Moreover, in all likelihood the actual cost to

84. In the example, a presumptive average that excludes the outlier claims is less than a presumptive average that includes them, so that the defendant gains an advantage from excluding these claims. The opposite result could occur if the sampled claims had more defense verdicts or no high-value outlier claims. In other words, the choice of method for calculating the presumptive average does not invariably favor either plaintiffs or defendants.

try an unsampled claim will vary from case to case. Because this actual cost is critical to defining which cases are outliers (and therefore excludable from the presumptive average), the court may have a difficult time identifying the outliers. Indeed, some of the outlier cases may have been ones in which the parties would have accepted the presumptive average. For instance, if the defendant had paid \$20,000 to achieve its sole defense verdict, the defendant may have preferred to take the presumptive average rather than go to trial. (It was unable to do so, however, because of the need to sample randomly.) Should such an outlier be counted as a claim worth the presumptive average rather than a claim worth \$0? To avoid these difficulties, a court might choose the administratively simpler and ultimately less expensive solution of using the results of all the cases, including the outliers, in calculating the amount of the presumptive judgment; the costs of obtaining a more accurate average may outweigh the gains from greater accuracy.

Other solutions for calculating the presumptive award are also possible. A solution used among statisticians is to replace the arithmetic mean with the median (which, on the figures in the hypothetical, is coincidentally \$15,000).⁸⁵ Another is to discard the outliers (often defined as the top and bottom ten percent of the results) and then to figure the presumptive average on the basis of the “trimmed mean”—although this technique is controversial because it excludes data.⁸⁶

There exists no one-size-fits-all solution to the problem of outliers. If a random sample is well constructed, the issue should be minimal. Although the problem is brought to the fore in a system of presumptive judgments, the same concerns exist in the classic form of trial by statistics. Once the trials conclude, the court, with the aid of statistical experts, must determine the most statistically appropriate way to represent the

85. See REFERENCE MANUAL, *supra* note 73, at 238 (noting that “studies of damage awards in tort cases find that the mean is larger than the median” and that “[i]f one is seeking a single, representative number for the awards, the median may be more useful than the mean”); *cf. In re Educ. Testing Serv. Praxis Principles of Learning & Teaching: Grades 7–12 Litig.*, 447 F. Supp. 2d 612, 624 (E.D. La. 2006) (adopting the median of prior individual settlements to determine the fair value of a class settlement).

86. See REFERENCE MANUAL, *supra* note 73, at 240 (discussing the reasons to discard outlier values in computing the mean); Stephen M. Stigler, *The Asymptotic Distribution of the Trimmed Mean*, 1 ANNALS STAT. 472 (1973) (discussing potential problems with using the “trimmed mean” and possible solutions to those problems).

average result in view of the ultimate goals of the process: deterrence and adequate compensation.⁸⁷

The presence of a significant number of outliers may well signal a lack of homogeneity within the sample. That concern merits separate consideration.

2. A Lack of Homogeneity

In many cases, presumptive judgments will work best only when the results cluster close enough to the average that the parties mutually have little incentive to litigate the individual claims. For instance, assume a random sample of ten claims in which two claims result in defense verdicts, two result in \$2000 verdicts, two in \$5000 verdicts, two in \$18,000 verdicts, and two in \$40,000 verdicts. Further assume that we use the arithmetic mean of the ten claims (\$15,000) as the average, and that each party will spend \$10,000 in individual trials. If the sample is representative of the remaining claims, the parties will jointly accept the presumptive award in only 20% of the cases; one party or the other has an incentive to contest the presumption in the remaining 80%. With so little promise of eliminating trials, the presumptive judgment may not be a useful device to resolve the individual claims. On the other hand, if the results of the sample trials yield a situation in which only 10% of the cases might result in individual trials, the process seems more promising—unless, perhaps, there were a million claims.⁸⁸

The ideal of few outlier claims puts an important limitation on the use of presumptive judgments. The approach is most likely to be useful when the defendant's liability to the plaintiffs is essentially uniform and the damages cluster within the boundaries established by the parties' costs of trying individual claims.⁸⁹ Conversely, presumptive averaging is least likely to be

87. The place at which the average is set also has an effect on the parties' incentives to litigate. If the selected method yields a higher average than other available methods, then fewer plaintiffs have an incentive to contest the presumption, but the defendant has an incentive to dispute a greater number of low-value cases. The opposite is true if the selected method yields a lower average than other available methods. Although statistical validity, deterrence, and compensation should be primary considerations in selecting an averaging method, choosing a method that reduces the likelihood of individual litigation may be relevant as a second-order consideration.

88. If presumptive averaging is to be useful, the percentage of the claims that are outliers requiring trial must decrease as the absolute number of claims increases.

89. The formula set out in the text following note 75 determines the upper

helpful when there is significant variability among the claims—either in terms of the defendant’s liability or in terms of the amount of damages. A court facing such variability has a limited number of options. One is to break the claims into subclasses in which the variability of injury is less, and to use presumptive judgments for each subclass. But the creation of subclasses increases the number of sample trials that must occur, and thus reduces the efficiency gains from averaging. In some cases courts could use the data from the sample trials to construct regression models that determine the value of claims with particular characteristics (age, gender, salary), thus rendering subclasses unnecessary.⁹⁰ Another option is to extract general information from the sampled claims in order to reduce the issues remaining in individual trials; for instance, the court could ask the juries in the sampled cases to itemize damages, and then fashion a presumptive award for a common element like pain and suffering while conducting discrete mini-trials on variable issues like lost earning capacity or medical expenses. A fourth option is to suffer the consequences of outliers; if the number of claims is not overwhelming, reducing their number by even 20% might be a useful time saver. Only as a last resort should courts reject presumptive awards in favor of some other form for resolving the dispute.⁹¹

Presumptive averaging’s need for a sample containing little variability also carries a risk. As we have seen, homogeneity within a sample is valuable in its own right; it helps to ensure the validity of the sample results, thus making extrapolation possible.⁹² A homogenous sample carries a secondary benefit in a system of presumptive averaging: fewer cases in which a party’s expected gains from contesting the presumptive average will exist, and therefore fewer individual trials will occur. But the two types of homogeneity are not the same thing. A court

boundary, and the formula set out in the text following note 77 determines the lower boundary.

90. See Kadane, *supra* note 73, at 304. I thank Ed Cheng for this idea.

91. This other form might not be a class action, and might even mean that a defendant will not be subject to liability for most or even all of the harm that it caused. Because presumptive judgments should be used only when they are better than alternatives, *see supra* note 71 and accompanying text, the use of this alternative form is necessarily worse than the use of presumptive judgments. But as long as the legal system insists on the right of defendants to make individual challenges to liability and damages determinations, *see supra* notes 58–66 and accompanying text, the cost of not using presumptive judgments is one that the legal system must bear.

92. See *supra* note 24 and accompanying text.

must be careful not to let the tail wag the dog: in other words, not to let the desire to construct a sample with few outliers⁹³ overcome the obligation to conduct scientifically valid random sampling.

For this reason, the use of presumptive judgments, in the main, is least likely to be helpful in positive-value cases⁹⁴ that contain significant fact-specific variations in either liability or damages. Conversely, it is most likely to be helpful in positive-value cases with little variability on the issues of liability and damages and in those “negative-value” cases⁹⁵ in which the parties have little to no incentive to contest the claims individually. Thus, presumptive judgments might work well for a large single-event catastrophe, such as an airplane crash or a factory explosion that levels a neighborhood—although even here significant variations in damages may exist and subclassing may be necessary. The same is true of a consumer claim in which a defendant has illegally overcharged ten million customers by \$.10 per transaction, with no customer having more than one thousand transactions (or \$100 in damages). In a perfect world, if the cost of determining the damages to each consumer exceeded \$100 for both the plaintiff and the defendant, then neither side has an incentive to contest the presumptive award of,

93. What I mean by “outlier” in this context is a case whose factual or legal posture is sufficiently different from those of other claims in the sample that a difference in outcome is both expected and is large enough that the plaintiff or defendant would have had an incentive to reject the presumptive judgment.

94. “Positive-value” cases are those in which the amount of money at stake is sufficiently great that the plaintiff has an incentive to bring an individual lawsuit.

95. In “negative-value” (or “large-scale, small-claim”) cases, the costs of individual litigation for a plaintiff exceed the value of the claim, effectively making the claim worthless. Class actions, which aggregate negative-value claims, can make such claims financially viable. See Jonathan R. Macey & Geoffrey P. Miller, *The Plaintiffs’ Attorney’s Role in Class Action and Derivative Litigation: Economic Analysis and Recommendations for Reform*, 58 U. CHI. L. REV. 1, 8–11 (1991). For this reason, courts have tended to be more hospitable to the use of class actions in negative-value cases than in positive-value cases. See, e.g., *Amchem Prods., Inc. v. Windsor*, 521 U.S. 591, 617 (1997) (stating that, although Rule 23(b)(3) “does not exclude from certification cases in which individual damages run high,” aggregation of small-value claims is the core reason for using class actions); *Castano v. Am. Tobacco Co.*, 84 F.3d 734, 748 (5th Cir. 1996) (arguing that small-stakes cases present “[t]he most compelling rationale for finding superiority in a class action”); *In re Rhone-Poulenc Rorer, Inc.*, 51 F.3d 1293, 1299 (7th Cir. 1995) (“In most class actions—and those the ones in which the rationale for the procedure is most compelling—individual suits are infeasible because the claim of each class member is tiny relative to the expense of litigation.”).

say, \$20 that random sampling yields. Of course, the world is not perfect, as the following section explains.

3. Strategic Behavior

In the imperfect real world, the defendant has an incentive to act strategically and object to the presumptive award in many negative-value cases. Assume, for instance, that the presumptive average award is \$20, that no plaintiff's claim exceeds \$100, and that it would cost the plaintiff and the defendant \$2000 apiece to prove the exact amount of damages. As long as the cost to the defendant of filing an objection to the presumptive award is less than \$20, the defendant will do so. The reason is that, because the cost to the plaintiff of proving individual damages (\$2000) exceeds the value of the claim (no more than \$100), an economically rational plaintiff will drop the claim. Thus, even though the defendant's cost of defending against an individual claim is also high, it can avoid any liability by filing an objection.

Given that a prime instance for the use of presumptive judgments is this sort of negative-value claim, the defendant's strategic behavior threatens the entire presumptive-average approach. But the problem of strategic behavior is greater than the negative-value situation. It is possible that a plaintiff (or the defendant) may reject the presumptive award merely to extort a higher (or lower) payment. For instance, if we assume that the presumptive average award is \$15,000, and that the costs to each side of proving individual damages is \$10,000, a plaintiff with a claim whose expected value is \$15,000 may reject the presumptive award and seek to settle the case with the defendant for \$24,000.⁹⁶ Likewise, the defendant may reject the presumptive award even for claims with an expected value of \$15,000 and seek to settle for \$6000. Especially if there is an imbalance in bargaining power between the sides, one party may try to impose costs to obtain a better deal.

Solutions to the problem of strategic behavior are at hand, although they are rather radical. One is to require a trial of any

96. A comparable phenomenon has been observed in class-action practice: class members who either object to a class settlement or opt out of the class in order to garner a settlement from the defendant that exceeds the award for other class members. See John E. Lopatka & D. Brooks Smith, *Class Action Professional Objectors: What To Do About Them?*, 39 FLA. ST. U. L. REV. 865 (2012) (discussing objectors); D. Theodore Rave, *Governing the Anticommons in Aggregate Litigation*, 66 VAND. L. REV. 1183, 1201 (2013) (discussing opt-outs).

case in which either party rejects the presumptive award; with the prospect of extracting a more favorable settlement gone, neither party has an incentive to act in a strategic fashion. This solution seems to run counter to the principle that settlements should be favored over litigation,⁹⁷ but in fact the opposite is true. The point of mandating trial for those who reject the presumptive award is to provide the parties with an incentive to accept the presumptive judgment, thus encouraging settlement. But this solution is not perfect, for it lets a repeat player (likely the defendant) who is willing to incur the costs of trial establish a reputation for litigiousness that may discourage the assertion of claims against it.

A better way to avoid strategic behavior is to allocate all of the reasonable costs of an individual proceeding—including an attorney’s fee—to the party who rejects the presumptive award.⁹⁸ Unless another fee-shifting provision requires it,⁹⁹ the proposal does not shift costs (including the costs of the sample trials) that were incurred before the presumptive award is determined. The effect of this limited cost shifting is to cut off a party’s reason to reject a settlement for extortionate purposes. Because the rejecting party must pay the opponent’s expenses in continuing to litigate, it can no longer use the opponent’s

97. See, e.g., *FTC v. Actavis, Inc.*, 133 S. Ct. 2223, 2230 (2013) (noting “the public policy favoring settlement of disputes”); *Rufo v. Inmates of Suffolk Cnty. Jail*, 502 U.S. 367, 407 (1992) (Stevens, J., dissenting) (discussing “the policy favoring the settlement of protracted litigation”); *Rodriguez v. Nat’l City Bank*, 726 F.3d 372, 378 (3d Cir. 2013) (articulating “a policy preference favoring voluntary settlement in class actions”).

98. A variation of this proposal is to require an objecting party to bear the expenses of the opposing party unless the objecting party obtains an award that falls outside the boundary within which an actor who is not acting strategically would accept the award. Thus, a plaintiff who obtained an award higher than the boundary established in the formula found in the text following note 75 would not be responsible for the defendant’s costs. Likewise, a defendant who obtained an award lower than the boundary established in the formula set out in the text following note 77 would not be responsible for the plaintiff’s costs. But informational problems beset this idea; it is easier in theory than in practice to compute the boundary lines, and the number may not even be knowable at the time when a party must decide whether to reject a presumptive award.

99. See, e.g., 28 U.S.C. § 1927 (2012) (permitting a court to assess “excess costs, expenses, and attorney’s fees reasonably incurred” against a party “who so multiplies the proceedings in any case unreasonably and vexatiously”); 42 U.S.C. § 1988(b) (2012) (permitting a court to award “a reasonable attorney’s fee” to a “prevailing party” in certain civil-rights cases); FED. R. CIV. P. 11(c)(4) (permitting a court to award a sanction, including “part or all of the reasonable attorney’s fees and other expenses directly resulting from the violation” of the obligations contained in Rule 11(b)).

fear of incurring those expenses as a cudgel to extract a more favorable settlement.

This approach also has a salutary secondary effect: it reduces the number of outlier claims. If we assume that the average award is \$15,000 and it would cost each party \$10,000 to try an individual claim, a party considering the rejection of the presumptive award must now factor in not only its own costs in an individual trial (\$10,000) but also the costs of the opponent (an additional \$10,000). Thus, a plaintiff has no incentive to reject the presumptive award unless the expected recovery exceeds \$35,000, and a defendant never has an incentive to reject the presumptive award (since it will be cheaper to pay the presumptive \$15,000 than to incur \$20,000 in legal expenses).¹⁰⁰

Given these numbers, an objection to this approach emerges. Plaintiffs in some cases (those in which the expected damages exceed \$35,000) have an incentive to reject the presumptive award, while the defendant never does. That fact suggests that the defendant will be required to pay too much; it will pay \$15,000 to most claimants, but more than \$35,000 to those who reject the presumptive award and successfully prove their entitlement to a higher award. As a consequence, the defendant will be overdeterred.

This concern arises only in positive-value cases (in which class certification is often difficult for other reasons),¹⁰¹ and only when neither subclassing nor a similar technique is capable of preventing upside outliers. Even here, the problem is confined to those cases in which the presumptive award (say, \$15,000) is less than the combined costs to plaintiff and defendant of an individual trial (say, \$20,000). Moreover, within this subset of cases, if the number of outliers is small, the cost savings from not expending \$20,000 in litigation expenses in each avoided individual trial may well exceed the occasional excessive compensation that the defendant must pay.¹⁰² Therefore, this

100. In this analysis I assume that both parties will incur the full \$10,000 in expenses; in other words, the case will not settle short of trial. I do not mean to suggest that the cost-shifting approach must be joined with the first approach, which made individual trial mandatory. Under the cost-shifting approach, the party rejecting the presumptive award must pay all further expenses incurred by both sides, whether the claim terminates in a settlement or a trial. If the parties settle short of trial, then the costs that the rejecting party must bear are only a portion of \$10,000.

101. See *supra* note 95.

102. Recall that, in economic terms, the goal of a legal system is to reduce the sum of accident costs, accident avoidance costs, and administrative costs

overdeterrence problem is greater in theory than it is likely to be in practice. But I acknowledge the seeming unfairness of a system that appears to work as a one-way ratchet favoring plaintiffs and exposing defendants to the risk of excessive deterrence. One way to even up the seeming disparity is to eliminate cost shifting when the defendant proves that it is not liable to an individual plaintiff. Drawing the cost-shifting line when the defendant prevails on liability is not irrational.¹⁰³

To be clear, however, it is not evident that adding this refinement to the cost-shifting approach is useful—especially given the narrow range of cases in which overdeterrence is a concern. The refinement also has the undesirable effect of providing defendants with an additional incentive to reject a presumptive award; it thus may encourage some of the strategic behavior that the pure cost-shifting approach avoids. But if a court is worried about overdeterrence, denying cost shifting in cases in which the defendants are not liable is a better solution than a system that rejects presumptive judgments and leaves plaintiffs to the vagaries of whatever other enforcement mechanisms they can employ.

With or without the exclusion of cost shifting when the defendant prevails on liability, the cost-shifting approach is subject to a substantial criticism: it creates an exception to the “American rule,” under which each party bears its own costs,¹⁰⁴ and invokes a “loser-pays” rule (or “English rule”) that non-U.S. legal systems adopt.¹⁰⁵ Thus, cost shifting seems out of step with the ordinary approach to fees used in American litigation.

(such as legal expenses), and that legal costs consist both of error costs and direct litigation expenses. *See supra* note 21. Any excessive compensation that results from cost shifting is an error cost, which is nonetheless worth incurring as long as the cost is less than the error costs associated with the strategic behavior that would occur in the absence of cost shifting plus the direct litigation costs that are avoided due to cost shifting.

103. While not irrational, it is also not logically compelled. This approach creates a different kind of inequality: plaintiffs who reject the presumptive approach must always bear all of the costs of doing so, while defendants bear all of the costs only when they are found to be liable.

104. *E.g.*, *Alyeska Pipeline Serv. Co. v. Wilderness Soc’y*, 421 U.S. 240, 247 (1975) (describing the American rule).

105. *See id.*; James W. Hughes & Edward A. Snyder, *Litigation and Settlement Under the English and American Rules: Theory and Evidence*, 38 J.L. & ECON. 225, 225, 229 (1995) (“Throughout most of the Western world the English rule applies, and the losing party in a dispute is liable for the winner’s legal fees, up to a reasonable limit.”); Edward F. Sherman, *Transnational Perspectives Regarding the Federal Rules of Civil Procedure*, 56 J. LEGAL EDUC. 510, 523 (2006) (“[M]ost of the world follows the ‘loser pays’ standard.”).

But this criticism will not succeed. The American rule is subject to numerous exceptions, both statutory and rule-based.¹⁰⁶ A particularly pertinent exception is Rule 68, which allows a court to shift the defendant's costs of continuing to litigate a case to the plaintiff when the defendant makes an offer to allow judgment on specified terms, the plaintiff rejects the offer, and "the judgment that the offeree finally obtains is not more favorable than the unaccepted offer"¹⁰⁷ The cost-shifting idea here is analogous if we conceive of the presumptive judgment as an offer of judgment. Of course, Rule 68 and presumptive-judgment cost shifting are not identical: the latter applies equally to plaintiffs and defendants,¹⁰⁸ and it shifts costs automatically on rejection of the presumptive judgment rather than in situations in which the judgment is less favorable than the offer. Both of these differences are necessary to prevent the parties from engaging in strategic behavior that would undermine the effectiveness of presumptive judgments.¹⁰⁹

106. For a handful of these provisions, see *supra* note 99. For a more comprehensive list, see HENRY COHEN, CONG. RESEARCH SERV., 94-970, AWARDS OF ATTORNEYS' FEES BY FEDERAL COURTS AND FEDERAL AGENCIES (2008) (listing approximately 200 fee-shifting statutes and other exceptions to the American rule, including common law provisions and procedural rules).

107. FED. R. CIV. P. 68(d).

108. By its terms, Rule 68 comes into play only when "a party defending against a claim . . . serve[s] on an opposing party an offer to allow judgment on specified terms" FED. R. CIV. P. 68(a).

109. Rule 68's application only to plaintiffs who reject an offer of judgment has long been criticized. See, e.g., Preliminary Draft of Proposed Amendments to the Federal Rules of Civil Procedure, 98 F.R.D. 339, 361-67 (1983) (proposing amendments that would have made Rule 68 equally applicable to plaintiffs and defendants); Edward F. Sherman & Christopher M. Fairman, *Interplay Between Mediation and Offer of Judgment Rule Sanctions*, 26 OHIO ST. J. ON DISP. RESOL. 327, 333 (2011) ("By limiting the application to defendants, Federal Rule 68 prohibits the potential benefits of its provisions from an entire class of litigant—plaintiffs."). If presumptive-judgment cost shifting were similarly applied only to plaintiffs, defendants have a reason to act strategically in rejecting the presumptive award, thus defeating much of the good that presumptive judgments can do. Likewise, allowing a party to avoid cost shifting as long as the ultimate award is more favorable to that party in absolute dollars (for instance, not requiring cost shifting when the presumptive award is \$15,000, and either a rejecting plaintiff receives \$15,001 or a rejecting defendant is ordered to pay \$14,999) gives both parties too much room to act strategically. A common purpose behind both Rule 68 and presumptive averaging—to foster settlement rather than litigation—is better advanced in the latter case by making the cost shift automatic. That is especially true because presumptive averaging has an important secondary purpose—to make feasible the aggregation needed to achieve a proper level of deterrence—that is better realized through automatic cost shifting.

The existence of cost shifting will affect the parties' behavior in a salutary fashion. As a general matter, a loser-pays (or cost-shifting) regime creates an incentive to assert claims that are more likely to prevail, while the American rule creates an incentive to bring claims of less certain merit.¹¹⁰ Thus, shifting costs to the party who rejects the presumptive award means that the party likely will accept the presumptive award unless the party has a high likelihood of proving an entitlement to a higher award (in the case of a plaintiff) or a lower award (in the case of a defendant).¹¹¹ In contrast to the usual criticism of the loser-pays rule—that it discourages the filing of meritorious but risky claims¹¹²—discouraging the pursuit of individual claims leaves the presumptive award in place. Presumptive-judgment cost shifting does not thwart enforcement of meritorious claims.

Rather, the point of cost shifting is to discourage socially costly litigation.¹¹³ The sample trials have already established the level of compensation that leads to optimal deterrence and are presumptively accurate.¹¹⁴ From a social-utility perspective, individual trials should occur only when the gains from additional accuracy exceed the costs of achieving that level of accuracy.¹¹⁵ In order to ensure that individual trials occur only in

110. See Barbara Luppi & Francesco Parisi, *Litigation and Legal Evolution: Does Procedure Matter?*, 152 PUB. CHOICE 181, 196–98 (2012) (analyzing incentives to litigate claims of uncertain merit under the loser-pays and American rules); see also Hughes & Snyder, *supra* note 105, at 229 (discussing the effects of fee shifting on claim quality).

111. A “higher” award is one in which the plaintiff’s marginal gain from the individual award (computed as the difference between the value of the individual award and the value of the rejected presumptive award) exceeds the joint additional costs of litigating the individual claim. A “lower” award is one in which the defendant’s marginal gain from the individual award (computed as the difference between the value of the rejected presumptive award and the value of the individual award) exceeds the joint additional costs of litigating the individual claim.

112. See, e.g., Thomas D. Rowe, Jr., *American Law Institute Study on Paths to a “Better Way”: Litigation, Alternatives, and Accommodation Background Paper*, 1989 DUKE L.J. 824, 888 (noting that the English Rule “may excessively discourage the pressing of plausible but not clearly winning claims, particularly when the prospective plaintiffs are strongly risk averse”).

113. See, e.g., *id.* at 887–91.

114. See *supra* notes 21–28 and accompanying text.

115. See *supra* notes 21, 46–47 and accompanying text (discussing the interconnections in the economic analysis of due process and trial by statistics); cf. *Mathews v. Eldridge*, 424 U.S. 319, 335, 343–48 (1976) (holding, in part, that the Due Process Clause permits departures from the adversarial process when the savings in litigation expense exceed the expected loss in the accuracy of the judgment).

this circumstance, the party seeking to depart from the presumptive award must fully internalize all the costs of its decision to reject the award.

This analysis, however, assumes that the parties are risk-neutral and operate with perfect information—in other words, that they will make the correct decision about accepting or rejecting the presumptive award. The following section examines the validity of these assumptions.

4. Risk Preference and Imperfect Information

The presumptive-judgment approach assumes that the parties can make accurate decisions to accept or reject presumptive awards. Any distortions in the capacity of the parties to do so can affect the validity of the procedure. Two principal sources of potential distortion are excessive risk taking or risk avoidance on the one hand, and imperfect information about the expected value of the individual claims on the other.

With respect to risk, the main concern is risk taking. If the parties are mutually risk-averse, they will underestimate their chances in individual litigation, and will opt for the certainty of the presumptive award. Therefore, mutual risk aversion cuts down on individual litigation, and does not raise the specter of an excessive number of individual claims.¹¹⁶ Risk taking, on the other hand, can have the opposite effect. A party may be unduly optimistic about its chances in individual litigation, and reject a presumptive award that it should accept. As a result, the marginal gains from enhanced accuracy are likely to be less than the costs of the individual proceeding, causing a net social loss.

Although risk taking may be a concern with some class actions, it is not an objection that should derail presumptive judgments across the board. In most negative-value class actions, not even the most risk-loving plaintiff will reject a presumptive award of \$20 when the maximum possible award is \$100 and it would cost \$20,000 (\$10,000 each for the plaintiff's costs and the defendant's costs) to obtain that award; the same is true of the defendant when a defense victory is achievable

116. Less individual litigation is not socially beneficial if the cost of litigation is less than the marginal increase in accuracy. As long as the parties are mutually risk-averse, however, it is likely that both plaintiffs and defendants failed to contest some awards that they should have, so that the effect of risk aversion somewhat washes out.

only at an expense of \$20,000.¹¹⁷ Even in positive-value class actions, the spectrum of risk preferences across class members means that risk-averse and risk-taking behaviors are likely to cancel out; some class members won't litigate when they should (the risk avoiders), and others will litigate when they shouldn't (the risk takers).¹¹⁸ Although the defendant's preference to take risk (and thus to reject the presumptive award more often than it should) may be more fixed, from a macroeconomic viewpoint the risk-avoiding preference of some defendants in some cases should be an adequate corrective to the risk-taking preferences of other defendants in other cases. Furthermore, victims and injurers generally tend to avoid risk,¹¹⁹ so concerns about the social cost of excessive risk taking are misplaced. Finally, the results of the sample trials should inject a degree of realism into the calculations of parties that might otherwise be unduly optimistic about their prospects at trial.

Relatedly, informational deficiencies can make it difficult for parties to make socially beneficial litigation decisions. In particular, in order for presumptive judgments to work, a party deciding whether to accept or reject a presumptive award must calculate the net expected value of an individual claim. To make a correct assessment, the party and its lawyer must have accurate information about the probability of recovery, the quantum of recovery if the claim is successful, and the cost of achieving that outcome.¹²⁰ To the extent that errors in these

117. I am assuming that the party who rejects the award must pay the reasonable costs of both sides in litigating the award individually; otherwise, a risk-taking defendant could have an incentive to challenge individual awards if it believes that doing so will keep other plaintiffs from asserting claims. See *supra* Part II.B.3.

118. This is not true when the claims are highly homogenous, so that no claimant has a claim whose expected value exceeds the presumptive judgment by enough to justify the cost of litigation. In this situation, risk aversion only reinforces the correct decision not to litigate individually, while those who are risk takers may impose social costs by litigating individual claims that they should not. To the extent that the costs of risk aversion and risk taking do not cancel each other out, the costs are part of the price that society pays for the right of individuals to contest the fact and amount of injury. See *supra* notes 58–64 and accompanying text.

119. See Keith N. Hylton, *The Economics of Third-Party Financed Litigation*, 8 J.L. ECON. & POL'Y 701, 708 (2012) ("In many real-world settings the victim and the injurer will be risk-averse."); Charles Silver, "We're Scared to Death": *Class Certification and Blackmail*, 78 N.Y.U. L. REV. 1357, 1408–16 (2003) (reviewing literature suggesting that plaintiffs are often risk averse, but defendants may sometimes be risk neutral in large-scale litigation).

120. In other words, plaintiffs and defendants need to know the values of the variables set out in the respective formulas in Part II.A.

calculations induce a party to accept a presumptive award, they are less troublesome because the errors eliminate individual trials.¹²¹ But recent work has shown that the opposite problem may be more prevalent: lawyers are subject to cognitive illusions that often lead them to reject settlements and prolong litigation.¹²²

Once again, informational difficulties operate over a fairly narrow range of class actions. In a negative-value class action, parties and their lawyers are unlikely to make informational mistakes of such a magnitude that they become convinced that a claim with an objective value of \$100 is worth litigating at an objective cost of \$20,000. In both negative-value and positive-value cases, the parties are not in the position that ordinary litigants and lawyers are in, because they already possess significant information about the value of their claims. One of the benefits of presumptive judgments is that parties have a group of similar cases—the sample verdicts used to calculate the presumptive award—against which they can measure their expectations.¹²³ Granted, parties and their lawyers may see distinctions between the sample results and their specific case that make other cases an imperfect guide to the expected value of their claim, but prior verdicts should establish guideposts that frame their decision. Remaining errors may wash out, as parties and their lawyers will be too optimistic about some claims (and thus try cases they should not) and too pessimistic about others (and thus not try cases that they should). To the extent that the errors do not wash out, the costs of those errors are attributable to the felt social need that caused the rejection of trial by statistics in its pure form: the desire to give parties the opportunity to contest whether and to what extent each individual was harmed.¹²⁴

In short, risk preferences and informational limitations may cause some suboptimal decisions that may lead to more individual trials and more cost than the ideal. As the use of the word “may” (twice) in the last sentence shows, it is not evident that a system of presumptive averaging will invariably result

121. As described *supra* note 116, a reduction in individual trials may make a system of presumptive judgment work better, but fewer trials is not necessarily socially optimal; sometimes the marginal gains in accuracy outweigh the cost of trial.

122. Andrew J. Wistrich & Jeffrey J. Rachlinski, *How Lawyers' Intuitions Prolong Litigation*, 86 S. CAL. L. REV. 571, 576–80 (2013).

123. See *supra* note 15 and accompanying text.

124. See *supra* note 40 and accompanying text.

in excessive trials. There are compensating factors—such as the risk aversion of most parties, the availability of the information supplied by sample verdicts, the prevalence of negative-value claims in class-action practice, and the wash-out effect that occurs when risk preferences or informational limitations lead some parties not to try claims that should be tried—that minimize this concern.

5. Political Legitimacy

A final concern is whether a court can establish a system of presumptive judgments on its own or must instead await legislation. Two of the critiques of the pure trial-by-statistics approach—that it violated *Erie* and the Rules Enabling Act¹²⁵—boil down to the claim that trial by statistics works a change in substantive law that federal courts lack the institutional competence to make. Is the same true of the modified system that I have called presumptive judgments?

The answer breaks into two parts. First, as a general matter, the answer is that presumptive judgments do not present the political-legitimacy problems that trial by statistics did. The critical difference between the two is the ability of the parties in the system of presumptive judgments to contest the average award. This is no small matter, for the damning feature of trial by statistics was the inability of parties to prove that a particular claimant suffered no injury or suffered an injury different in amount from the average.¹²⁶ With presumptive judgments, parties retain the fundamental substantive right to contest the fact and quantum of injury. The parties may choose not to exercise that right; the expected costs of trying an individual claim may outweigh the gains of doing so. But providing choice does not amount to an abridgment of a substantive right. As the Supreme Court recently observed, “the fact that it is not worth the expense involved in *proving* a statutory remedy does not constitute the elimination of the *right to pursue* that remedy.”¹²⁷

Creating presumptions to aid the resolution of disputes is part and parcel of the traditional judicial function.¹²⁸ Over the

125. See *supra* notes 52–58 and accompanying text.

126. See *supra* notes 40, 58–66 and accompanying text.

127. *Am. Express Co. v. Italian Colors Rest.*, 133 S. Ct. 2304, 2311 (2013).

128. See generally J. Harvie Wilkinson III, *Toward a Jurisprudence of Presumptions*, 67 N.Y.U. L. REV. 907 (1992) (arguing that a broad system of presumptions can mediate between a system of rules and a system of discretion,

years courts have created hundreds of presumptions.¹²⁹ Many are factual in nature; human experience has shown that when fact *A* is true, it is likely that fact *B* is also true. Hence, courts establish the presumption that, when a party proves fact *A*, the jury can presume fact *B* (in the absence of contrary evidence).¹³⁰ Other presumptions blend factual and legal conclusions; when fact *A* is true, then legal consequence *C* can also be presumed to be true (in the absence of contrary evidence). For instance, a blood alcohol level of .10% can create a presumption that the driver was operating the car under the influence;¹³¹ similarly, in a securities case, a court can presume that the shareholder with the largest financial stake in the case should be the class representative.¹³² Presumptive judgments act like this latter type of presumption; from the facts that (1) the defendant's action was wrongful toward people in the same position as the plaintiff and (2) the average harm suffered by a representative subset of similarly situated plaintiffs was \$15,000, for instance, the court presumes that this plaintiff was injured in the amount of \$15,000.

Presumptive averaging is the weakest form of presumption, for it goes away as soon as a party contests it.¹³³ Given

capturing the benefits of each system with fewer drawbacks).

129. WRIGHT & GRAHAM, *supra* note 70, § 5122.1 (“[T]he common law recognized scores of such presumptions.”); *id.* § 5125 (providing a non-exhaustive list of more than 200 presumptions).

130. Courts regard some “presumptions” as “conclusive” or “irrebuttable” even when evidence contrary to the presumption exists. *Id.* § 5122.1; *see also id.* § 5123.1 n.14 (listing several conclusive presumptions contained in statutes). These devices are not true presumptions, but rather legal fictions designed to achieve certain substantive outcomes for policy reasons. *Id.* §§ 5122.1, 5123.1. The pure trial-by-statistics approach, in which each unsampled plaintiff automatically received the average award, could be understood as a type of conclusive presumption.

131. *Id.* § 5122.1.

132. 15 U.S.C. § 77z-1(a)(3)(B)(iii)(I)(bb) (2012).

133. On the collapsing nature of the presumption, see *supra* note 70. The effect of most evidentiary presumptions is stronger. The strongest “presumption” (to the extent that it can even be classified as one) is the irrebuttable presumption. *See supra* note 130. When the opponent can rebut a presumption, the presumption typically retains some legal effect: either it allows the jury to infer that the presumed fact is true or it switches the burden of persuasion to the opponent. *See* WRIGHT & GRAHAM, *supra* note 70, §§ 5122.1, 5122.2 (discussing theories about the effect of a presumption and the approach of Federal Rule of Evidence 301). With presumptive averaging, however, none of the stronger effects of the presumption exists. Indeed, a stronger effect is not even possible. Because it is not informed of the size of the average award in the sampled cases, a jury can make no inference about the value of the present case from the result of those cases.

that courts have the power to establish stronger presumptions, the power to create a weak presumption should raise few legitimacy concerns as long as the court has a rational basis for creating the presumption. And it clearly does. Courts have long recognized that they have the authority to foster settlement¹³⁴ and efficiently resolve disputes.¹³⁵ Presumptive judgments are designed to meet these goals.

Indeed, although its solution was not exactly the “presumptive judgment,” one court obliquely hit upon this idea almost twenty-five years ago. In *Langley v. Coughlin*,¹³⁶ class members alleged that they were being confined in conditions and under practices that violated the Constitution. They sought injunctive relief to prevent future harm, as well as damages for past violations.¹³⁷ After settling the claims for injunctive relief, the court faced the problem of determining the proper compensation for past harm.¹³⁸ In a report and recommendation that the district judge adopted, the magistrate recognized the difficulty of awarding individual damages for past harm, and suggested that one option would be to award *per diem* damages to each prisoner.¹³⁹ The magistrate also proposed an alternative:

Alternatively, the Court could establish a presumptive *per diem* award for each day during which conditions were of a given degree of unconstitutional severity and then permit both plaintiffs and defendants to seek a variation—either up or down—for specific class members based upon a showing of unique individual circumstances. Very

134. See *supra* note 97 and accompanying text.

135. See FED. R. CIV. P. 1 (stating that the Federal Rules of Civil Procedure “should be construed and administered to secure the just, speedy, and inexpensive determination of every action and proceeding”); FED. R. CIV. P. 16(c)(2)(A) (granting the judge the case-management power to “formulat[e] and simplify[] the issues”); FED. R. CIV. P. 16(c)(2)(L) (granting the judge the case-management power to “adopt[] special procedures for managing potentially difficult or protracted actions that may involve . . . unusual proof problems”); FED. R. CIV. P. 16(c)(2)(P) (granting the judge the case-management power to “facilitat[e] in other ways the just, speedy, and inexpensive disposition of the action”); FED. R. CIV. P. 23(d)(1)(A) (granting the judge in a class action the power “to prescribe measures to prevent undue repetition or complication in presenting evidence or argument”).

136. *Langley v. Coughlin*, 715 F. Supp. 522 (S.D.N.Y. 1989).

137. *Id.* at 531.

138. *Id.* More specifically, after settlement of the injunctive claims, the defendants moved, *inter alia*, to decertify the class. *Id.* at 551. One of their arguments for decertification was the difficulty the plaintiffs faced in proving individual damages. *Id.* at 557–59.

139. *Id.* at 558.

few, if any, class members are likely to be the subject of such a separate proceeding¹⁴⁰

The proposed solution in *Langley* varies from (and compares unfavorably to) presumptive judgments, principally because the magistrate apparently intended to determine the *per diem* award without the benefit of random sampling.¹⁴¹ But it is noteworthy that neither the magistrate nor the district judge questioned their power to create a presumption. Given the courts' discretionary power to calculate the quantum of damages in complex cases,¹⁴² the power to create a presumptive award seems unassailable.

The second part of the legitimacy question concerns the power of a court to order cost shifting onto the party that contests a presumptive award. Although there are many exceptions to the American rule,¹⁴³ nearly all are either statutory or embodied in the Federal Rules of Civil Procedure, which have been subjected to a rulemaking process under authority delegated by Congress.¹⁴⁴ A small reserve of inherent judicial power to order one party to pay another party's costs exists, but it is not clear that this power reaches the situation presented by presumptive judgments.¹⁴⁵

Of course, the American rule is itself judge-made, and therefore subject to judicial modification.¹⁴⁶ In other contexts judges have creatively modified the ordinary rules for attorney's fees to meet the needs of complex litigation.¹⁴⁷ They also

140. *Id.*

141. *Id.* at 557–58.

142. *See supra* note 64 and accompanying text.

143. *See supra* notes 104, 106 and accompanying text.

144. *See* 28 U.S.C. §§ 2072–74 (2012) (describing the scope of the delegation to the Supreme Court and the rulemaking process).

145. *See Chambers v. NASCO, Inc.*, 501 U.S. 32, 50 (1991) (holding that a court has the inherent power to sanction a party for bad-faith conduct, even when some of the same conduct might be sanctionable under federal statutes or the Federal Rules, but noting that a court must “exercise caution in invoking its inherent power”).

146. *See Alyeska Pipeline Serv. Co. v. Wilderness Soc’y*, 421 U.S. 240, 257–60 (1975) (describing the history and origin of the modern American rule).

147. *See, e.g., Vincent v. Hughes Air W., Inc.*, 557 F.2d 759, 769–72 (9th Cir. 1977) (applying the “common fund doctrine,” under which “a private plaintiff, or his attorney, whose efforts create, discover, increase or preserve a fund to which others also have a claim is entitled to recover from the fund the costs of his litigation, including attorneys’ fees,” to award lead counsel fees in a class action); *cf. Charles Silver & Geoffrey P. Miller, The Quasi-Class Action Method of Managing Multi-District Litigations: Problems and a Proposal*, 63

possess a loosely defined reservoir of case-management power from which cost shifting might be teased out.¹⁴⁸ In short, it is at least debatable that a judge could order cost shifting as part of a presumptive-judgment scheme.

The prudent course, however, is to enact legislation or to go through the rulemaking process to invest courts with this cost-shifting power. The American rule is so deeply embedded in the structure of American litigation that alterations are best made through a process that provides more political legitimacy than a common-law pronouncement—at least at the federal level.¹⁴⁹ Because cost shifting is a linchpin of the presumptive-judgment process,¹⁵⁰ the fate of the process may hinge on legislative will or judicial rulemaking.

But if a legislature or judicial-rulemaking body is willing to go this far, would it not make sense for that body to go the extra step and enact the system for which presumptive judgments are a second-best solution: trial by statistics? Not necessarily. Trial by statistics is a more radical, and therefore less politically palatable, solution because it denies individuals the ability to contest issues of causation and damages.¹⁵¹ For this reason, trial by statistics also constitutes a shift in the underlying substantive law, thus arguably putting it beyond the reach of judicial rulemaking.¹⁵² Presumptive judgments, even with a cost-shifting component, do not raise the same concerns. True, shifting costs has an effect on the scope of substantive rights. But the same is true of every procedural rule.¹⁵³ An effect on substantive rights, in and of itself, does not delegitimize either cost

VAND. L. REV. 107, 109–11 (2010) (recognizing, but questioning, the present application of the doctrine in multidistrict cases).

148. For the likeliest textual sources of this case-management power, see *supra* note 135. See also *In re Fannie Mae Sec. Litig.*, 552 F.3d 814, 822 (D.C. Cir. 2009) (“District judges must have authority to manage their dockets, especially during massive litigation . . .”).

149. The same analysis need not pertain in a state in which the state courts enjoy broader authority to tailor legal processes to the needs of specific forms of litigation.

150. See *supra* Part II.B.3.

151. See *supra* note 40 and accompanying text.

152. See 28 U.S.C. § 2072(b) (2012) (requiring that Federal Rules of Civil Procedure “not abridge, enlarge or modify any substantive right”).

153. See Bone, *supra* note 22, at 909 (“Even the early twentieth-century reformers understood that procedure affects outcome.”); Jay Tidmarsh, *Procedure, Substance, and Erie*, 64 VAND. L. REV. 877, 891 (2011) (“[E]very ‘procedural’ rule changes entitlements and values of claims . . .”).

shifting in general or presumptive judgments in particular.¹⁵⁴ Presumptive averaging should attract legislators and judicial rulemakers who are interested in finding a compromise that captures many of the benefits of trial by statistics while imposing none of its side effects on the scope of substantive rights.

C. THE CASE FOR PRESUMPTIVE JUDGMENTS

Having fleshed out some necessary practical aspects of the proposal, I turn to the broader argument for presumptive judgments. Until now, I have made a series of smaller arguments to set the contours of presumptive judgments and evaluate objections to these contours. The picture that has emerged is that of a second-best alternative to trial by statistics, made necessary by a legal world in which the parties' right to contest the fact of injury (causation) and the amount of injury (damages) is sacrosanct. In such a world, trial by statistics is impossible, despite the evident deterrence and efficiency gains achievable. Indeed, as the discussion of the practical effects of presumptive averaging made clear, presumptive averaging has some efficiency and deterrence limitations that pure trial by statistics does not: a substantial number of outliers may make the process unworkable for positive-value claims, some strategic behavior in rejecting the presumptions may occur, and risk preferences and informational limitations may lead to some socially undesirable decisions to contest (or not contest) the presumptive award.¹⁵⁵ As I have emphasized, these costs are a necessary consequence of protecting the right of individuals to submit individualized proof on causation and damages. As long as a class action using presumptive judgments yields more net social benefit than other class actions or dispute-resolution mechanisms,¹⁵⁶ these costs are worth incurring, and a presumptive-judgment process is worth adopting.

But arguing only that a presumptive-judgment process is the most efficient mechanism available, all things considered, undersells its strength. Certainly a part of the argument for presumptive averaging is its capacity to capture some of the ef-

154. *Cf. Bus. Guides, Inc. v. Chromatic Commc'ns Enters., Inc.*, 498 U.S. 533, 553 (1991) ("Imposing monetary sanctions on parties that violate . . . [Rule 11] may confer a benefit on other litigants, but the Rules Enabling Act is not violated by such incidental effects on substantive rights.").

155. *See supra* Parts II.B.1–3.

156. On the foundational nature of this assumption to a system of presumptive judgments, see *supra* note 71.

efficiency gains that trial by statistics had promised. Except on efficiency grounds, however, trial by statistics was a deeply flawed concept. It provided inaccurate compensation to many of the unsampled class members, and it gave neither those members nor the defendant an opportunity to participate in the process of determining the proper relief due in individual cases.¹⁵⁷ It pushed the scope of judicial power to alter substantive rights to (and possibly beyond) the permissible limit, and it arguably infringed on constitutional norms for due process and jury trial.¹⁵⁸ Presumptive averaging, which provides parties with the opportunity to obtain accurate individual recoveries at trial, fares far better on all of these scores.

More generally, procedural arguments tend to fall into one of three camps: an efficiency camp, a rights-based camp, and a process camp.¹⁵⁹ The efficiency approach seeks to minimize the sum of litigation and error costs; the rights-based approach emphasizes the accurate enforcement of individual substantive rights; and the process camp emphasizes values such as autonomy, participation, and dignity.¹⁶⁰ Although disagreeing over the nature of a proper outcome, the first two theories are both consequentialist (or outcome-centered); the third is deontological (or process-centered).

Presumptive averaging broadly appeals to all three rationales. Given that trial by statistics is off the table, presumptive averaging is the least costly way to resolve the dispute—for the simple reason that it is to be used only when it is least costly.¹⁶¹ Thus, it satisfies the efficiency model.

Presumptive averaging also does not discourage the enforcement of individual rights. It establishes a presumptive award, but it permits individuals the freedom to prove that they are entitled to pay or receive a different recovery. Of course, the economics of presumptive judgments (especially given cost shifting to the party who chooses to contest the presumption) may dictate that the parties accept the presumptive award rather than press on to obtain a more accurate individu-

157. See *supra* Part I.B.

158. See *supra* Parts I.B–C.

159. See Bone, *supra* note 22, at 919; see also Lawrence B. Solum, *Procedural Justice*, 78 S. CAL. L. REV. 181, 191 (2004) (positing three models of adjudication: an accuracy model, a balancing (or efficiency) model, and a participation model).

160. See Bone, *supra* note 22, at 919.

161. See *supra* note 71 and accompanying text.

al award. But that reality is always present in a world of costly procedure. The costliness of procedure inhibits a plaintiff with a valid \$500 claim from bringing suit to vindicate the right. The costliness and uncertainty of procedure likewise induce parties to settle their claims rather than try them to their conclusion.¹⁶² Under a rights-based theory, the goal of procedure should be to keep these costs to a minimum, in order to obtain the most enforcement possible, while still providing a forum to determine the validity of claims for all those willing to endure any remaining costs. Under presumptive judgments, parties who are willing to pay for the privilege are able to obtain an individualized assessment of their claims or defenses.¹⁶³ The presumptive-judgment process no more discourages the exercise of that privilege than any process that uses the loser-pays rule.

For the same reasons, presumptive judgments do not directly offend non-instrumental values such as participation, dignity, autonomy, or equality. Parties retain the right to participate in individual litigation; they are not required to accept the presumptive award. Of course, the presumptive award, when combined with cost shifting, creates an inducement not to litigate, but the same is true of many presumptions that seek to discourage litigation on certain matters.¹⁶⁴ Attempting to influence an autonomous individual's choice not to use a social resource (such as a court system) unless a social benefit exists is not a violation of the party's autonomy when the individual remains free to pay for the privilege of using the resource. Likewise, presumptive judgments start with the proposition of equal treatment for all class members, but allow the parties the opportunity to assert relevant differences. Like cases are treated alike, but the parties retain the power to prove that some cases are unlike.

The only process-based concern arises indirectly—from the effect of presumptive averaging when its use allows a court to certify a class that otherwise would not have been certified.¹⁶⁵ A person who believes that class actions invariably violate rights of participation or autonomy might thus object to any process

162. See Shavell, *supra* note 76, at 63–69 (describing how risk-neutral parties make settlement valuations based on expected value and the costs of litigation).

163. See *supra* Part II.A.

164. See, e.g., COHEN, *supra* note 106, at 1, 61.

165. On the way in which the process might have an impact at the class-certification stage, see *supra* notes 5–13 and accompanying text.

that “improves” class actions in a way that made them more readily usable.¹⁶⁶ Even here, the argument would need to be limited to positive-value cases; in negative-value cases class actions do not violate any significant interests in participation or autonomy for the simple reason that the class members would never have sued individually.¹⁶⁷ Whatever the precise breadth of the autonomy critique, a presumptive-judgment process must plead guilty to this particular charge: its effect is indeed to make class or other mass aggregation a more viable alternative.

On balance, presumptive averaging fares well under the standard arguments made to justify procedural devices. It is admittedly a pragmatic solution, not perfect from any perspective. From an efficiency perspective, trial by statistics is better, but that device in its pure form is dead and unlikely to return. From a rights-based perspective, presumptive judgments are not as desirable as individual adjudication. But in the real world individual adjudication can be enormously costly. The choice will often be between imperfect presumptive judgments and no adjudication at all; in light of that reality, presumptive judgments, with their reservation of the right to pursue individual litigation that the parties are willing to pay for, satisfies the rights-based approach. For similar reasons, presumptive averaging does a decent, albeit imperfect, job of respecting the rights of autonomy, participation, and equality.

As a pragmatic solution, presumptive judgments are subject to the criticism that they fail to be faithful to any single theory of procedure. In procedure, however, such pragmatic balancing is common,¹⁶⁸ especially because no theory of proce-

166. For an extended critique of class actions principally on autonomy grounds, see MARTIN H. REDISH, *WHOLESALE JUSTICE: CONSTITUTIONAL DEMOCRACY AND THE PROBLEM OF THE CLASS ACTION LAWSUIT* 125–34, 140–75 (2009). For another critique of class actions due to their limited capacity to vindicate participatory principles, but ultimately concluding that class actions with limited participatory rights (or, in some instances with no participatory rights) can be appropriate, see Solum, *supra* note 159, at 313–20.

167. See REDISH, *supra* note 166, at 172 (recognizing that opt-out negative-value class actions may be permissible when the small claim value renders “the constitutional interest in litigant autonomy . . . de minimis”). But Professor Redish would not permit negative-value class actions when the amount at stake is so small that putative class members would not even bother to file a claim. *Id.* at 131–32. In his view, these “bounty hunter” suits, which benefit only the lawyers, are functionally *qui tam* actions unauthorized by statute. *Id.*

168. See *Mathews v. Eldridge*, 424 U.S. 319, 335 (1976) (establishing a balancing test for analyzing issues under the Due Process Clause); *cf.* FED. R. CIV. P. 1 (stating that the goal of the Federal Rules of Civil Procedure is “to

sure has yet won the heart and mind of all. How we do things (process) should matter, but what we achieve (substance) also should matter.¹⁶⁹ Even when these considerations do not lead to the choice of a single correct procedural rule, our obligation is to make “choices . . . on reasoning that we can reflectively *sustain* if we subject them to critical scrutiny.”¹⁷⁰ Presumptive judgments are precisely that sort of solution.

CONCLUSION

Using a presumptive-judgment approach would not have saved the *Wal-Mart* class action, which suffered from defects unrelated to the difficulty of calculating class members’ individual damages.¹⁷¹ Nor is the technique appropriate for every class action seeking damages. While it is no panacea for everything that ails class actions, presumptive judgments can be useful when the difficulty of calculating individual damages is the sticking point in class certification and when, in addition, the parties have little financial incentive to contest the application of the presumptive award to individual claims. In this modified form, trial by statistics should enjoy a long and fruitful life.

secure the just, speedy, and inexpensive determination of every action and proceeding”).

169. *Cf.* AMARTYA SEN, *THE IDEA OF JUSTICE* 20–23, 208–17 (2009) (developing a “comprehensive outcome” theory of justice, in which both methods and outcomes are relevant considerations).

170. *Id.* at 180.

171. A majority of the Court found that the class action failed to meet the commonality requirement of Rule 23(a)(2), *Wal-Mart Stores, Inc. v. Dukes*, 131 S. Ct. 2541, 2550–57 (2011), and the Court unanimously held that Rule 23(b)(2) could not be used as a vehicle for obtaining damages, *id.* at 2557–61.