Outline Overview of Recent Challenges to Antitrust Class Certification and Proposal for Overcoming Them by Returning to the Basics of Deterrence

David Rosenberg

My object is to overview in outline format the crux of the recent challenges to antitrust class action certification and a proposal for overcoming them. I will focus in Part I on the core concerns animating the challenges, specifically concerns about plaintiffs' ability to provide econometric or other reliable means of accurately determining the defendant's aggregate liability and damages by common or generalized proof. I move on to note the unreality of some of the perceived concerns and the paradoxical nature of the currently prevailing solutions, which courts have adopted to address the real problems. Before sketching my proposal for overcoming the challenges, I will specify its premise in Part II: getting back to the basics of deterrence. I start in this Part by briefly noting the deterrence function of the antitrust class action; then I turn to consider the relationship between that deterrence function and the current pursuit of accuracy in determining aggregate liability and damages. In Part III, I set out the key elements of my proposal for improving the determination of aggregate liability and damages and for distributing any recovery of aggregate damages. In particular, I propose using of a new sampling method to determine aggregate liability and damages and distributing aggregate damages (net of costs) to Social Security. The appended paper develops arguments for these proposals together with a further proposal for coordinating private class action and public agency enforcement of antitrust laws.

[1] This outline advances tentatively conceived conjectures and arguments that will hopefully stimulate fruitful thought and discussion among the participants in the American Antitrust Institute's second annual Invitational Symposium on the Future of Private Antitrust Enforcement. Please take notice that the outline has been prepared solely for participants' use and accordingly should not be disseminated to non-participants or used for purposes other than those directly related to participation in the Symposium. Please do not quote or cite this outline without the author's express permission.

Contents

I. Recent Challenges

A. ***Core Concern about "Accuracy"***

Mass consumer class actions brought under federal antitrust and related state laws are currently engendering more judicial resistance than they have perhaps at any time since the promulgation of Rule 23 in 1966. In a spate of recent decisions, the main driver of challenges to the certification of antitrust class actions (the phrase hereinafter includes related class actions enforcing state antitrust and consumer fraud or protection laws) is concern about the "accuracy" of the proof and process for determining in the aggregate whether the defendant violated the law and if so what sanction in damages should be imposed. Of the three principal elements constituting federal antitrust cause of action – (1) collusion or conduct in violation of the antitrust laws; (2) causal connection between the violation and alleged injury or loss; and (3) damages – the courts focus most intensively on the causation element or as it its often called the element of "injury," "impact" or "fact of damage." See e.g., *In re new Motor Vehicles Canadian Export Antitrust Litigation*, 552 F.3d 6 (1st Cir. 2008) (noting that this element of injury in the antitrust context is generally referred to as "impact," or "fact of damage"; "e.g., causation"); see also *Continental Orthopedic Appliances, Inc., v. health Ins. Plan of greater New York, Inc*, 198 F.R.D. 41 (E.D.N.Y. 2000).

As it relates to class certification, the courts conceive of the causation element as a basic condition of liability, as distinguished from questions on the damage distribution side of the action – regarding how much in damages to award any given individual member of the class. Generally, as part of the prima facie case, plaintiffs are required to establish causal "impact" class-wide, that is, on an aggregate basis. Given the practical impossibility of determining impact cumulatively in a mass consumer class action – class member-by-class member – the courts insist on common or generalized proof. *In re Live Concert Antitrust Litig.*, No. 06-ML-1745-SVW, 2007 WL 4291967, at *38-39, 2007 U.S. Dist. LEXIS 82894, at *129-132 (CD.Cal. Oct. 22, 2007). *See also Blades v. Monsanto Co.*, 400 F.3d 562, 575 (8th Cir.2005); *Kurihara v. Best Buy Co.*, No. 06-01884-MHP, 2007 WL 2501698, at *9, 2007 U.S. Dist. LEXIS 64224, at *25-26 (N.D.Cal. Aug. 30, 2007). This demand has become the crucible for rigorous testing of whether the mode by which plaintiffs seek to satisfy the common or generalized proof requirement assures that the element of class-wide, aggregate impact can be determined reliably – that is, accurately.

1. Denial of class certification for failure to show class-wide injury by common or generalized proof. When class-wide impact is not uniform but rather appears likely to vary significantly among class members under the differing, competing, and compounding effects of market, consumer behavior, economic, social, and other potentially relevant factors, courts require plaintiffs to establish a prima facie case on the injury element by means of common or generalized proof. Thus, although they often repeat the mantra that variations in class members' respective damages will not block class certification – which is hardly a major concession given the small stakes involved for most consumers that usually make filing claims prohibitively expensive even when formulaic processes are used to measure individual damages – courts are resolutely

drawing the line at damage distribution, and insisting on undifferentiated, aggregate resolution of the impact element. Plaintiffs typically seek to satisfy this requirement for common or generalized proof through expert witnesses offering econometric models for class-wide assessment of the aggregate loss attributable to the defendant's antitrust violation. Plaintiffs' inability to produce reliable common or generalized proof of class-wide impact results in denial or withdrawal of class certification under one or more of the various Rule 23a and b(3) requirements for typicality and adequacy of representation, predominance of common over non-common questions, and manageability.

The following excerpts from recent decisions are illustrative:

In re Milk Products Antitrust Litigation, 195 F.3d 430 (8th Cir. 1999) (emphasizing the varying markets where milk was sold and differences in purchase prices to volume versus whole purchasers as reason for denying certification of price-fixing class action):

> Plaintiffs' antitrust theory is that defendants conspired to fix their list prices of fluid milk. Defendants introduced uncontroverted evidence that many sales to class members were made at cost-plus formula prices unrelated to defendants' list prices. The class might of course be able to prove that defendants' formula prices were inflated by a conspiracy to fix seemingly unrelated list prices. But the relevant question is whether [the named plaintiff] as sole class representative has a sufficient incentive to represent class members who must prove this additional unlawful effect. Again, that is a legitimate reason to question [the named plaintiff's] adequacy and typicality.

Blades v. Monsanto Co., 400 F.3d 562 (8th Cir. 2005) (denying class certification of price-fixing claims against manufacturers of genetically modified soybean and corn seeds because variations in the price and sale terms of the hybrid products differed so greatly as to preclude proof of class-wide impact on a common basis):

> The undisputed presence of negligible and zero list premiums indicate that if appellees performed their agreement, their performance was not across the board, but extended to some list prices and not to others. Consequently, to show injury from price inflation, each plaintiff would need to present evidence that the list prices of the seeds he purchased, not just some or even most of the hundreds of list prices on appellees' price lists, were inflated. . . . Given appellants' lack of any other type of common evidence, the district court did not abuse its discretion in concluding that some proposed class members would be forced to fall back on a comparison of actual list prices to hypothetical competitive prices. The court did not abuse its discretion in concluding that, because of the variety of hybrids and the varying factors affecting list prices, the construction of hypothetical competitive prices would require evidence that varied among hybrids and perhaps across geographical pricing regions. The evidence showed the presence of individualized market

> conditions, which would require individualized, not common, hypothetical markets-thus individualized, not common, evidence.

In re new Motor Vehicles Canadian Export Antitrust Litigation, 552 F.3d 6 (1st Cir. 2008) (denying for lack of predominance class certification of claims under the Clayton Act and state antitrust and consumer production acts by U.S. automobile purchasers charging American automobile manufacturers with conspiring to prevent lower-priced cars manufactured in Canada from being exported to U.S. and thereby inflating sales prices in U.S.):

> Plaintiffs seem to rely on an inference that any upward pressure on national pricing would necessarily raise the prices actually paid by individual consumers. There is intuitive appeal to this theory, but intuitive appeal is not enough. Even if it is fair to assume that hard bargainers will usually pay prices closer to the dealer invoice price and poor negotiators will usually pay prices closer to the MSRP, a minimal increase in national pricing would not necessarily mean that *all* consumers would pay more. Too many factors play into an individual negotiation to allow an assumption-at least without further theoretical development-that any price increase or decrease will always have the same magnitude of effect on the final price paid. Even if Professor Hall's proposed models could determine when MSRPs and dealer invoice prices were affected for which models and to what degree, it is a further question whether it can be presumed that all purchasers of those affected cars paid higher retail prices.
>
> Some courts have allowed a presumption of class-wide impact in price-fixing cases when "the price structure in the industry is such that nationwide the conspiratorially affected prices at the wholesale level fluctuated within a range which, though different in different regions, was higher in all regions than the range which would have existed in all regions under competitive conditions." *Winoff Indus., Inc. v. Stone Container Corp. (In re Linderboard Antitrust Litig.)*, 305 F.3d 145, 151 (3d Cir.2002) (quoting *Bogosian v. Gulf Oil Corp.*, 561 F.2d 434, 455 (3d Cir.1977)). If effective dealer invoice prices in the real world were equal to or greater than the effective MSRPs in the but-for world-that is, if the entire negotiating range in the but-for world would have been below the entire negotiating range in the real world-it would be easier to presume that all consumers suffered impact. The district court discussed the *Bogosian* presumption in its May 12, 2006 order, *Motor Vehicles V*, 235 F.R.D. at 138 n.35, but plaintiffs disclaim any intent to rely on the *Bogosian* model.

2. Convergent treatment of antitrust and other types of class action:

a. It is evident that courts are tending to regard antitrust class actions as of a piece with mass tort and other class actions seeking damages.

Note the analytic similarity between the foregoing antitrust decisions with *Mclaughlin v. American tobacco Co.*, 522 F.3d 215 (2nd Cir. 2008) (denying class certification of economic loss claims by "light" cigarette smokers under Racketeer Influenced and Corrupt Organizations Act charging manufacturers with fraudulently promoting these cigarettes as more healthful than "full-flavored" cigarettes; finding questions of "loss causation" and injury required individualized determinations and hence common questions did not predominate):

> In this case, plaintiffs' theory is that they suffered an economic loss because they were overcharged for Lights. Plaintiffs argue that defendants' misrepresentation that Lights were healthier led to an increased market demand for light cigarettes, which drove up the price of Lights. Thus, plaintiffs contend that they paid more for Lights than they otherwise would have had the truth been known. As with reliance, plaintiffs claim that they can establish loss causation on a class-wide basis.
>
> This argument fails because the issue of loss causation, much like the issue of reliance, cannot be resolved by way of generalized proof. As we noted above, individuals may have relied on defendants' misrepresentation to varying degrees in deciding to purchase Lights; some may have relied completely, some in part, and some not at all. Thus, establishing the first link in the causal chain-that defendants' misrepresentation caused an increase in market demand-would require individualized proof, as any number of other factors could have led to this increase. If smokers purchased more light cigarettes and drove up demand for reasons unrelated to defendants' misrepresentation, plaintiffs could not show that their economic injury was directly caused by defendants' fraud. * * * We have stated that "[t]he key reasons for requiring direct causation include avoiding unworkable difficulties in ascertaining what amount of the plaintiff's injury was caused by the defendant's wrongful action as opposed to other external factors." Here, because factors other than defendants' misrepresentation may have intervened and affected the demand and price of Lights, and because determining the portion of plaintiffs' injury attributable to defendants' wrongdoing would require an individualized inquiry, plaintiffs cannot establish loss causation on a class-wide basis.
>
> Plaintiffs also argue that the requisite injury to "business or property" is susceptible to class-wide proof. … In this case, proof of injury, or whether plaintiffs have been harmed, is bound up in proof of damages, or by how much plaintiffs have been harmed. Only by showing that plaintiffs paid more for light cigarettes than they would have but for defendants' misrepresentation can plaintiffs establish the requisite injury under civil

> RICO. … Plaintiffs have advanced two theories to support their claim of injury and how the "but for" price of Lights (and thus the resulting damages) might be calculated: the loss of value theory and the price impact model. However, because neither of these theories is plausible as a matter of law, because both would lead to an impermissible fluid recovery, and because the acceptable measure of injury-out-of-pocket damages-would require individualized proof, class-wide issues cannot be said to predominate.
>
> In this case, out-of-pocket losses cannot be shown by common evidence because they constitute an inherently individual inquiry: individual smokers would have incurred different losses depending on what they would have opted to do, but for defendants' misrepresentation. For example, smokers who would have purchased full-flavored cigarettes instead of Lights had they known that Lights were not healthier would have suffered no injury because Lights have always been priced the same as full-flavored cigarettes. By contrast, those who would have quit smoking altogether could recover their expenses in purchasing Lights. And those who would have continued to smoke, but in greater moderation, could recover something in between. Thus, on the issue of out-of-pocket loss, individual questions predominate; plaintiffs cannot meet their burden of showing that injury is amenable to common proof.

b. Whatever may be said of other types of class action, the convergent treatment regrettably swerves the antitrust class action away from its long-standing as well as well-recognized function in deterring collusive, monopolistic, and other illegal actions aimed at restraining competition in the marketplace. See e.g., *Hawaii v. Standard Oil Co. of Cal.*, 405 U.S. 251 (1972) (commenting on the comparative advantages of class action relative to parens patriae enforcement of antitrust laws) and also *infra*.:

> We note in passing the State's claim that the costs and other burdens of protracted litigation render private citizens impotent to bring treble-damage actions, and thus that denying Hawaii the right to sue for injury to her quasi-sovereign interests will allow antitrust violations to go virtually unremedied. Private citizens are not as powerless, however, as the State suggests. … Congress has given private citizens rights of action for injunctive relief and damages for antitrust violations without regard to the amount in controversy. [Rule 23] provides for class actions that may enhance the efficacy of private actions by permitting citizens to combine their limited resources to achieve a more powerful litigation posture. …Parens patriae actions may, in theory, be related to class actions, but the latter are definitely preferable in the antitrust area. Rule 23 provides specific rules for delineating the appropriate plaintiff-class, establishes who is bound by the action, and effectively prevents duplicative recoveries.

Note the complete disregard of the *Hawaii v. Standard Oil Co*. endorsement of the deterrence function of antitrust class action and convergent treatment of the antitrust class action with mass tort and other types of class action in the recent ruling in the Microsoft litigation, *Deiter v. Microsoft Corporation*, 436 F.3d 461 (9th Cir. 2006) (denying certification of class including individual and business purchasers of software on grounds that individual purchasers were not typical and adequate representatives):

> The class action device, which is "designed as an exception to the usual rule that litigation is conducted by and on behalf of the individual named parties only," *Gen. Tel. Co. of Southwest v. Falcon*,457 U.S. 147, 155, 102 S.Ct. 2364, 72 L.Ed.2d 740 (1982), allows named parties to represent absent class members when, *inter alia*, the representative parties' claims are *typical* of the claims of every class member. To be given the trust responsibility imposed by Rule 23, "a class representative must be part of the class and possess the same interest and suffer the same injury as the class members." *Id.* at 156. That is, "the named plaintiff's claim and the class claims [must be] so interrelated that the interests of the class members will be fairly and adequately protected in their absence." *Id.* at 157 n. 13, 102 S.Ct. 2364. The essence of the typicality requirement is captured by the notion that "as goes the claim of the named plaintiff, so go the claims of the class."
>
> The typicality requirement goes to the heart of a representative parties' ability to represent a class, particularly as it tends to merge with the commonality and adequacy-of-representation requirements. *See Amchem*, 521 U.S. at 626 n. 20, 117 S.Ct. 2231; *Gen. Tel.*, 457 U.S. at 157 n. 13, 102 S.Ct. 2364. The representative party's interest in prosecuting his own case must simultaneously tend to advance the interests of the absent class members. For that essential reason, plaintiff's claim cannot be so different from the claims of absent class members that their claims will not be advanced by plaintiff's proof of his own individual claim. That is not to say that typicality requires that the plaintiff's claim and the claims of class members be perfectly identical or perfectly aligned. But when the variation in claims strikes at the heart of the respective causes of actions, we have readily denied class certification.

B. ***Pre-certification Merits Review of Expert's Model for Establishing Class-wide Injury by Common or Generalized Proof***:

Whether due to experience or innate skepticism stemming from the disjuncture between the "real economic world" and the "economist's hypothetical model," see *Hanover Shoe, Inc. v. United Shoe Machinery Corp*., 392 U.S. 481 (1968), courts have become more wary of accepting assurances from plaintiffs of their readiness to deploy econometric models that can reliably and effectively meet the requirement for common or generalized proof of class-wide impact.

Indeed, courts are increasingly reticent to place judicial resources at risk by certifying a class action without good reason to believe that it will not founder for lack of such common or generalized proof. Thus, courts are conditioning class certification on plaintiffs showing far more in support of their petition for certification than merely promising that their expert can work out a model by the close of discovery or simply putting forward a qualified expert's pre-certification report proffering a facially plausible, albeit tentative, model. The distinct recent trend is for courts to conduct a searching and comprehensive pre-certification investigation deeply into the merits. Akin to combining the level of merits scrutiny that occurs on summary judgment and Daubert motions (see Rule 56, F.R.Civ.P.; Rule 702, F.R.Evid.; and *Daubert v. Merrell Dow Pharms., Inc.*, 509 U.S. 579 (1993), courts test the realistic reliability and utility of the proffered model in purporting to provide common or generalized proof on the injury element of class-wide, aggregate impact.

In re new Motor Vehicles Canadian Export Antitrust Litigation, 552 F.3d 6 (1st Cir. 2008), *supra*:

> Plaintiffs' theory of impact on indirect purchasers is both novel and complex. Injury in price-fixing cases is sometimes not difficult to establish. Plaintiffs do not, however, advance such a price-fixing theory. Rather, the plaintiffs' theory is that the higher prices are the result of a "but-for" world. In step one of plaintiff's theory, but for the defendants' illegal stifling of competition, the manufacturers would have had to set dealer invoice prices and MSRPs lower to avoid losing sales to the lower-priced Canadian cars coming across the border for resale in the United States. In step two, the higher dealer invoice prices and MSRPs enabled by this stifling of competition resulted in injury to consumers in the form of higher retail prices. * * * The first step of plaintiffs' theory requires demonstrating that the defendants' actions did result in an increase in dealer invoice prices and MSRPs in the United States. This in turn depends on at least two factors. First, there would have had to be, in this but-for world, a flood of significantly lower-priced Canadian cars coming across the border for resale in the United States during times of arbitrage opportunities, enough cars to cause manufacturers to take steps to protect the American market from this competition by decreasing nationally set prices. As plaintiffs themselves note, without a very large number of cars poised to cross the border, a nationwide impact on the automobile market of the sort required by plaintiffs' theory is implausible, and the theory collapses. In our view, plaintiffs' expert Professor Hall had not yet, at the time of class certification, fully answered such potentially relevant questions as how the size of the but-for influx of cars would be established or how large that influx would have to be to affect the national market sufficiently to raise effective dealer invoice prices and MSRPs. * * * Second, the plaintiffs must be able to sort out the effects of any permissible vertical restraints from the effects of the alleged,

> impermissible horizontal conspiracy. This question was raised below but was not fully addressed. Professor Hall asserted in a purely conclusory manner that the effects could be separated out using the concept of Nash equilibriums. If plaintiffs do not have a viable means for distinguishing between these two sets of effects, they cannot show that it was the horizontal conspiracy that caused the impact on the domestic national market upon which their theory depends. * * * While these are both questions that are themselves susceptible to common proof (the potential size of the gray market and the distinction between the effects of horizontal and vertical restraints), they go to the viability of a novel theory upon which plaintiffs rely to establish an element of their claim through common means. In that sense, these factual questions are akin to the question of market efficiency in securities class actions employing the fraud-on-the-market presumption of reliance. Cases like *PolyMedica* and *Xcelera* demonstrate that such factual bases of theories of common proof are appropriately, although preliminarily, tested at the class certification stage. As for the second step of plaintiffs' theory, it must include some means of determining that each member of the class was in fact injured, even if the amount of each individual injury could be determined in a separate proceeding. Predominance is not defeated by individual damages questions as long as liability is still subject to common proof. *Tardiff,* 365 F.3d at 6; *Smilow,* 323 F.3d at 40; 6 Conte & Newberg,*supra,* § 18:27, at 91. This is because the class action can be limited to the question of liability, leaving damages for later individualized determinations. *See* *Tardiff,* 365 F.3d at 7; *Smilow,* 323 F.3d at 41; 6 Conte & Newberg,*supra,* § 18:53, at 179 & n. 10, § 18:56, at 190-92. Establishing liability, however, still requires showing that class members were injured at the consumer level. It is unclear to us how plaintiffs intend to make this connection.

For an example of pre-certification intensive judicial scrutiny of the plaintiffs' economic expert and econometric model discrediting the purported utility of the proffered analysis in providing reliable common or generalized proof of class-wide impact, see *In re Graphics Processing Units Antitrust Litigation*, 2008 WL 2788089 (N.D.Cal.) (denying certification of a consumer class of business and individual purchasers of computer graphics cards):

> Plaintiffs' Expert David Teece * * * goes on to present correlation analyses purportedly establishing significant correlations across defendants' graphics products and across all purchasers. * * * Significantly, for all his correlations, Dr. Teece mysteriously chose to *average* certain products and purchases with one another and then correlate instead of correlating disaggregated data for individual products and particular customers (*e.g.,* Microsoft, Dell, individual consumers, etc.). Dr. Teece's correlation is not based on data examining the relationship between prices of specific products as paid by particular direct

purchasers. For example, no correlation is established between prices paid by individual consumers for a particular graphics card and prices paid for the same graphics card by Best Buy. In essence, Dr. Teece has evaded the very burden that he was supposed to shoulder-*i.e.,* that there is a common methodology to measure impact across individual products and specific direct purchasers. His report says little about how specific product pricing was correlated across buyers or whether prices paid for multiple products by particular direct purchasers were correlated. If data points are lumped together and averaged before the analysis, the averaging compromises the ability to tease meaningful relationships out of the data. * * *Despite having all of the necessary data set to correlate individual products and particular purchasers, Dr. Teece abstained and presented nothing of the sort. * * * Instead, he claims that such analysis is unnecessary because it may yield correlations driven by factors that are not of interest. In his words, "[b]y averaging across OEM and across Channel, one can reduce the individual differences in some of the dimensions that affect price" (Teece Reply Report ¶ 42). But it was Dr. Teece's burden to show that individual differences between products and purchasers *could* be accounted for, *not* that individual differences could be ignored. * * * While averaging may be tolerable in some situations, the record here shows that it has in fact masked important differences between products and purchasers. Defense expert, Dr. Michelle Burtis, presented her own analysis correlating disaggregated data for specific products and particular direct purchasers (*e.g.,* Microsoft, Dell, individual consumers, etc.). When this analysis is evaluated, any supposed correlation evaporates. Due to the strong diversity of products and purchasers, the analysis yields hundreds of thousands of correlation coefficients. For instance, the correlation between the price Dell paid for a particular GPU chip and the price Hewlett-Packard paid for the same GPU chip is determined. Another correlation between the price Dell paid for a GPU chip and the price Best Buy paid for a GPU card is then determined. The data set used for the analysis was the same as that used by Dr. Teece. The results are telling. For ATI's products and purchasers, 67% of the total correlations were negative or statistically not different from zero. For Nvidia's products and purchasers, 58% of the total correlations were negative or statistically not different than zero.

* * *

[P]laintiffs have failed to show how this generic model can be used to show common impact across the class. Conclusory statements are not enough. Notably absent from Dr. Teece's [regression] analysis are other factors that would likely have an impact on prices, including GPU performance, product features, supply and demand factors, the customization of the product, and product deadlines associated with the sale. Without incorporating such variables, it is impossible to account for the diversity in products and purchasers here. * * * Direct-purchaser plaintiffs have fundamentally failed to show that the many factors

> influencing pricing of GPU products were systematic and are now controllable. Even if such factors did have a systematic impact with respect to the class, Dr. Teece's general model hardly shows how he has accounted for them. This order does appreciate that not every single factor can be accounted for in conducting a regression analysis but direct-purchaser plaintiffs' regression falls exceptionally short of establishing proof of common impact. * * * Dr. Teece may not meet his burden by simply stating that "economic theory" dictates that prices for retail and wholesale purchases generally go up together. Direct-purchaser plaintiffs must demonstrate through "properly-analyzed, reliable evidence" that a common method of proof exists to prove impact on a class-wide basis. *Dukes*, 509 F.3d at 1179.No such evidence has been presented here. Dr. Teece's failure to include individual consumers in the same model as the wholesale purchasers indicates that proof is not common to the class, at least without having to create a separate model or category for each particular kind of purchaser, which itself would suggest that individual issues predominate over those common to the class.
>
> Dr. Teece admits that his regression analysis fails to "include other variables" that would have a significant impact on demonstrating common impact across the class (*id.* at ¶ 69). But he states that at the time he filed his original report that he had "limited information" to account for all the variables (*ibid.*). In fact, at several points throughout his reply report, Dr. Teece contends that a more acceptable model will be developed as this case further progresses. For instance, in his reply when discussing whether or not common impact was demonstrated he states, "[i]n this vein, the vast bulk of discovery on such subjects as the defendants' pricing policies and pricing implementations has not yet occurred"(*id.* at ¶ 3). His reply report was signed on June 2, 2008. Dr. Teece's belief that the "vast bulk of discovery" has yet to occur is wrong. In this case, formal discovery will close in a little over a month. Direct-purchaser plaintiffs have had since early November 2007 to conduct whatever discovery they required to meet their burden on this motion. The undersigned judge has expressly made himself available to resolve any discovery problems on shortened time, but no request for assistance ever arrived.

C. The Unreal Problem of Typicality and Adequacy of Representation. In several leading cases, courts have rejected class action treatment of antitrust claims on finding that the class representatives, despite standing up to enforce the antitrust laws on behalf of the class, may have incurred a level or type of injury or impact that differs from many or most class members. Particularly worrisome for courts is the presence among class representatives of a "profession" plaintiff. Indeed, courts have taken note of the fact that class representatives may include consumers who may in fact have benefited economically from the violation. For example, when a defendant perpetrates an illegal predatory pricing scheme, some class members may not have suffered injury, indeed they may have benefited from lower prices. From the ex post point of view, these class

members may be seen as having an interest in conflict with members of the class who did not benefit, and in fact may have suffered actual injury.

In re Graphics Processing Units Antitrust Litigation, supra,

> Defendants challenge each of the three representative plaintiffs. Only one challenge is compelling. That challenge is to Karol Juskiewicz. Defendants contend Juskiewicz should be disqualified for three distinct reasons. *First* is his nine-year history with his counsel and his apparent propensity to thrust himself into class action suits. *Second* is the timing of his graphics card purchase-*i.e.*, one week before the filing of his complaint. *Third* is Juskiewicz's current role as a class representative in a separate litigation involving Intel, one of AMD's competitors, where he purportedly has taken an inconsistent position with this suit. These concerns are real. It appears as if Juskiewicz along with his counsel have attempted to contrive litigation. Such behavior amounts to an abuse of the class action process. Juskiewicz is hereby disqualified as a representative plaintiff.

Allied Orthopedic Appliances, Inc., v. Tyco Healthcare Group L.P., 247 F.R.D. 156 (C.D. Cal. 2007) (finding of conflicts of interest between class representative and other members of the class precludes class certification of antitrust claim against manufacturer of pulse oximetry sensors and cables by direct-purchaser hospitals):

> [T]o this Court's knowledge, no circuit approves of class certification where some class members derive a net economic benefit from the very same conduct alleged to be wrongful by the named representatives of the class, let alone where some *named* plaintiffs derive such a benefit. Because, as discussed with respect to impact, the substantial divergence in the way the elimination of market-share discounts and sole-source GPO contracts would affect small hospitals compared to large hospitals represents a fundamental conflict, and because Plaintiffs and Dr. Beyer [plaintiffs' econometric expert] essentially ignore this problem, the named plaintiffs have not been shown to be adequate class representatives.

The courts' concerns are entirely misplaced regarding typicality, adequacy of representation, and necessary incentive to prosecute the class action. Professional class representatives serve as "whistleblowers," whose particular function in deliberately purchasing a product with a suspect price is to facilitate the speedy and efficient filing of a class action to enforce the antitrust laws. There is no difference between such actions to establish the basis for initiating a private enforcement action and those typical of public law enforcers in posing as renters to test for housing discrimination or bar patrons to test for compliance with bans on sales of alcoholic beverages to minors. More generally, the courts' concerns are misplaced because they train on individuals who have no control, financial and legal, over the prosecution of the antitrust class action. Such control is exclusively vested in plaintiffs' counsel, the would-be class counsel, whose incentives to

maximize the expected value of the class antitrust claim should be the courts' focus of attention.

Appropriately motivating and monitoring class counsel is the only relevant concern for courts. The class representative is neither in charge of the class action nor the "client" of an attorney seeking appointment or receiving appointment as class counsel. The attorney's client, "the attorney's only client is the class." *Greenfield v. Villager Industries*, 483 F.2d 824 (3rd Cir. 1973) ("Experience teaches that it is counsel for the class representative and not the named parties, who direct and manage these actions. Every experienced federal judge knows that any statement to the contrary is sheer sophistry.") See also, *Rand v. Monsanto Co.*, 926 F.2d 596 (7th Cir. 1991) ("In a class action, the client is the class."). As such, "[t]he ultimate focus falls on the appropriateness of the class device to assert and vindicate … the rights of the *entire* class …" and class counsel thus "owe the entire class a fiduciary duty once the class complaint is filed." *In re General Motors Corp. Pick-Up Truck Fuel Tank Products Liability Litigation*, 55 F.3d 768 (3rd Cir. 1995).

The primacy of counsel – relative to the class representative – as the exclusive legal representative of the class in seeking and after obtaining appointment as class counsel has been rendered unambiguous by the 2003 amendments to Rule 23.

Advisory Committee Notes, Rule 23(g) (2003):

> Paragraph 1(B) [of Rule 23 (g)] recognizes that the primary responsibility of class counsel, resulting from appointment as class counsel, is to represent the best interests of the class. The rule thus establishes the obligation of class counsel, an obligation that may be different from the customary obligations of counsel to individual clients. Appointment as class counsel means that the primary obligation of counsel is to the class rather than to any individual members of it. The class representatives do not have an unfettered right to "fire" class counsel. In the same vein, the class representatives cannot command class counsel to accept or reject a settlement proposal. To the contrary, class counsel must determine whether seeking the court's approval of a settlement would be in the best interests of the class as a whole.
>
> * * *
>
> Paragraph (2)(A) [of Rule 23 (g)] authorizes the court to designate interim counsel during the pre-certification period if necessary to protect the interests of the putative class. Rule 23(c)(1)(B) directs that the order certifying the class include appointment of class counsel. Before class certification, however, it will usually be important for an attorney to take action to prepare for the certification decision. The amendment to Rule 23(c)(1) recognizes that some discovery is often necessary for that determination. It also may be important to make or respond to motions before certification. Settlement may be discussed before certification. Ordinarily, such work is handled by the lawyer who filed the action. In

> some cases, however, there may be rivalry or uncertainty that makes formal designation of interim counsel appropriate. Rule 23(g)(2)(A) authorizes the court to designate interim counsel to act on behalf of the putative class before the certification decision is made. Failure to make the formal designation does not prevent the attorney who filed the action from proceeding in it. Whether or not formally designated interim counsel, an attorney who acts on behalf of the class before certification must act in the best interests of the class as a whole. For example, an attorney who negotiates a pre-certification settlement must seek a settlement that is fair, reasonable, and adequate for the class.

D. The Paradoxical Solution of Pre-certification Merits Review

To test the reliability and effectiveness of plaintiffs' expert econometric models and their applications as reliable means of supplying common or generalized proof of class-wide, aggregate impact, courts are conducting in the pre-certification phase of the case the functional equivalent of summary judgment and Daubert proceedings supported by full-scale discovery. In so doing, the courts are holding a trial before the trial especially when they also engage in the widespread practice of reviewing the merits of the plaintiffs' entire case by summary judgment prior to considering their petition for class certification.

Whether this is good or bad policy, see dissenting opinion in *In re Motor Vehicles Canadian Export Antitrust Litigation, supra,* the emergent if not dominant practice of testing the merits of the plaintiffs' proffer of expert econometric models and applications prior to certification effectively produces exactly the opposite from what the courts are apparently seeking to achieve. The avowed purpose of the pre-certification vetting the viability of the plaintiffs' claim is to avoid certification of a foredoomed class action, and the potential costs of class-wide discovery, supervision of class counsel, and the oft repeated canard of imposing a "blackmail" settlement effect on defendants. See Hay & Rosenberg, "Sweetheart" and "Blackmail" Settlements in Class Actions: Reality and Remedy, 75 Notre Dame L. Rev. 1377 (2000) (disputing the one-sided, defendant-centered characterization of the supposed "blackmail" effect from a single class-wide trial, and proposing a simple solution to the double-sided "blackmail" effect: conduct and average the outcomes of multiple class-wide trials).

The paradoxical result is that in conducting pre-certification testing of the merits of plaintiffs' claims, based, as it must be, on full-scale discovery, and formal or implicit designation of plaintiffs' counsel as interim class counsel, and intensive review of the merits of the plaintiffs' claim, with potential class-wide binding effect, see e.g., *In the Matter of Bridgestone/Firestone, Inc., Tires Products Liability Litigation*, 333 F.3d 763 (7th C. 2003), courts are effectively certifying, from the start and without any consideration of the prerequisites and conditions for convening a Rule 23 (b)(3) class action, a mandatory class action. On the necessity and social benefits of mandatory class action, see Rosenberg, D., Mandatory-Litigation Class Action: The Only Option for Mass

Tort Cases, 115 Harv. L. Rev. 831 (2002); Rosenberg, Adding A Second Opt-out to Rule 23(B) (3) Class Actions: Cost Without Benefit, 2003 U. Chi. Leg. Forum 19.

II. Back to Basics of Deterrence

A. The Deterrence Function of the Antitrust Class Action

As noted above, the chief function of the antitrust class action for treble damages is to deter violations of antitrust and related laws. Although compensation is also a function, see e.g., *Brunswick Corp. v. Pueblo Bowl-O-Mat, Inc*., 429 U.S. 477 (1977), the public interest in effective law enforcement by means of antitrust class action is never served by sacrificing deterrence to provide more compensation. See also *Illinois Brick Company v. Illinois*, 434 U.S. 881 (1977).

1. Deterrence Priority. Given that an antitrust violation would not be such unless its costs to society were judged inappropriate and not offset by benefits, it follows that society is always better off by preventing the wrongdoing before it occurs rather than paying for its consequences after the fact. Thus, in *Hanover Shoe, Inc. v. United Shoe Machinery Corp.*, 392 U.S. 481 (1968) the Court authorized the plaintiff to recover the entire overcharge without allowing any pass-on defense. The *Hanover Shoe* doctrine, which resembles the collateral source rule in torts – without the availability of insurance subrogation to recoup overpayments to plaintiffs – constitutes a judicially created rule of deterrence priority. See Justice Brennan's observations in his dissention opinion in *Illinois Brick*, with which the majority expressed agreement:

> The Court [in *Hanover*] correctly discerned that the difficulty of reconstructing hypothetical pricing decisions [under an offset rule], would aggravate the already complex nature of antitrust litigation since pass-on defenses would become commonplace whenever the chain of distribution extended beyond the plaintiff. This would lessen the effectiveness of the treble-damages action, since ultimate consumers individually often suffer only minor damages and therefore have little incentive to bring suit. Limiting defendants' liability to the loss of profits suffered by direct purchasers would thus allow the antitrust offender to avoid having to pay the full social cost of his illegal conduct in many cases in which indirect purchasers failed to bring suit. Consequently, "those who violate the antitrust laws by price fixing or monopolizing would retain the fruits of their illegality because no one was available who would bring suit against them. Treble damage actions, the importance of which the Court has many times emphasized, would be substantially reduced in effectiveness."
>
> Hanover Shoe thus confronted the Court with the choice, as had been true in Darnell-Taenzer, of interpreting s 4 in a way that might overcompensate the plaintiff, who had certainly suffered some injury, or of defining it in a way that under-deters the violator by allowing him to retain a portion of his ill-gotten overcharges. The Court chose to interpret s 4 so as to allow the plaintiff to recover for the entire overcharge. This choice was

consistent with recognition of the importance of the treble-damages action in deterring antitrust violations.

On the priority for deterrence over compensation, see Fried & Rosenberg, Making Tort Law: What Should Be Done and Who Should Do It (2003).

2. Scale Economies. It is well established that class action is necessary to achieve the deterrence objectives of private treble-damage antitrust actions because collectivization overcomes the barrier to suit imposed against the mass of consumers whose harms generally entail very small individual stakes. See e.g., *Hawaii v. Standard Oil Co. of Cal.*, 405 U.S. 251 (1972) and related discussion *supra*. The resulting individual claims, commonly called "negative value" claims, are, notwithstanding the trebling of damages, almost never economically worthwhile for a plaintiff-attorney to prosecute because litigation costs virtually always exceed the expected return from judgment. This negative value ratio is enormously greater in antitrust cases given the complex, expert-dependent nature of the litigation. By enabling the class counsel to spread the costs of litigation across all claims, essentially, allowing class counsel to exploit the scale economies and thereby in principle to develop the merits of claims on common questions at the cost of developing one claim, class action may give the lawyer sufficient return to make prosecuting the class action economically worthwhile.

But, there is an additional benefit from class action scale economies that has important bearing in the context of recent challenges. In a number of cases, courts have adopted "a middle ground," certifying some sub-group for class action treatment and deny certification to the balance of the class. See e.g., *In re Graphics Processing Units Antitrust Litigation*, 2008 WL 2788089 (N.D.Cal.) (certifying individual consumer class of direct, online purchasers while denying certification to business and other direct purchasers and all indirect purchasers for lack of predominance due to the inability of plaintiffs to present a viable method of demonstrating class-wide injury based on common or generalized proof). Such limited class actions preclude class counsel from fully exploiting available scale economies. This constraint can dramatically undercut the law enforcement value of the antitrust class action because of two interrelated but rarely noticed consequences of curtailing the ability of plaintiffs to fully exploit available scale economies.

a. It is thus essential to understand that class action scale economies not only to reduce litigation costs, but also to raise the quality of the case made on plaintiffs' behalf. The latter point is often overlooked by courts and commentators in considering the utility of class action. Yet, it is elemental that when the stakes in litigation are high, it will be worthwhile to invest in higher quality preparation, e.g., experts, discovery, and, of course, lawyers, for an increased probability of success at trial, compared to the lower-quality investment that would be worthwhile to make when the stakes are smaller. In short, with more at stake, the parties invest more and to greater effect, not only to reap maximum net aggregate benefit, but also to raise the value of each classable claim. Indeed, investing to maximize the value of all claims may well raise the investment cost per claim and overall

in absolute terms. But the added expense will be more than offset by the higher return per claim and overall.

Certification of an unlimited class action corrects the problem of affording plaintiffs incomplete opportunity to fully exploit scale economies. Of course, the existence of scale economies presumes the existence of commonalities among claims that plaintiffs seek to certify for class action treatment. The point of the recent challenges to class certification is that such commonalities may not exist regarding the element of injury when the proffered econometric models fail to provide reliable common or generalized proof that can transform otherwise heterogeneous claims into homogeneous claims. But the fact that universal commonality is absent does not mean that sub-group commonalities are also absent. The failure of plaintiffs' econometric models to pass muster as sufficiently reliable for determining class-wise, aggregate impact does not imply that proceeding by a more individualized mode of proof necessarily renders the class action uneconomic for class counsel to prosecute. There may yet be sufficient sub-group commonalities to provide class counsel with sufficient returns from scale.

Courts lack the necessary information to decide whether the economics favor or disfavor prosecuting the class action; only the investor, class counsel, is likely to have the informational basis and incentives to make the efficient decision. That the class action may consume scarce judicial resources to the exclusion of other claims is simply a function of the market system we generally employ to allocate those resources among competing claimants. If class counsel concludes that it is economically worthwhile to invest in the class action, accounting for the opportunity cost of foregoing other litigation, then the market has spoken.

b. But there is yet a further, indeed crucial reason for courts to hesitate long before taking a centralized-planning stance to overrule or supplant the market and refuse to certify all claims class-wide. By enhancing the scale opportunities for plaintiffs, class action corrects a bias in the civil liability system that undermines the deterrence benefits of civil actions. In the absence of a comprehensive class action, the defendant will wield superior litigation power over plaintiffs. This position of dominance stems from the fact that a defendant naturally and automatically owns and reaps the aggregate, class-wide benefit from its defense effort against multiple claims. Essentially, defendants have the litigation advantages of a "de facto" class action because they can spread the costs of preparing and litigating common questions across all pending and prospective claims.

The class action thus affords the plaintiffs the same incentives to invest in the litigation as defendants have, and thereby motivates class counsel to invest optimally in maximizing the aggregate recovery just as defendants invest optimally to defeat it. In short, the class action is essential to achieving optimal deterrence because it alone assures the opportunity for the court to make an informed decision based on an optimally developed case for as well as against liability.

B. Deterrence and Accuracy

The pre-certification testing of plaintiffs' capacity to proffer common or generalized proof of class-wide, aggregate impact aims at assuring that the proof, or means of generating it – the econometric model – will provide an accurate account of reality. Accuracy in determining antitrust liability – the chief element or generally, including the sanction, damages – serves deterrence in motivating businesses to obey the law. If the determination of liability errs on the high-side, then businesses may be over-deterred, shying away from lawful, productive activity. Conversely, if the determination of liability errs on the low side, then firms may be under-deterred and more willing and likely to engage in wrongful conduct.

Of course, the costs of mustering and judging the evidence lead to acceptance of optimal accuracy by means of proof that entails reasonably tolerable degree of error. Thus, generally the standard of proof for civil liability is the preponderance of evidence. This means proof establishing greater than 50% probability that the defendant violated the law and caused class-wide harm amounting to an aggregate loss in some amount that should be levied against it in damages.

However, while accuracy promotes deterrence, the central question remains regarding what reality or state of the world should plaintiffs' proof establish with accuracy. To put the question in terms of what appears to be the assumption underpinning current doctrine and practice: does deterrence require an accurate account of the *actual* class-wide impact suffered by the class? The answer from deterrence theory is "no."

To be sure, accurate determination of the actual class wide impact or the actual harm caused by defendant's antitrust violation will accomplish deterrence. But such *ex post* accuracy is not necessary for deterrence purposes. Indeed, all that deterrence requires is *ex ante* accuracy. This means that the threat of liability should be such that at the time the defendant contemplates violating the law, it internalizes – expects – to incur the sanction of aggregate liability and damages at the appropriate level that will not make violation of the law too cheap (under-deterrence) or compliance with the law too costly (over-deterrence). In other words, the threat of aggregate liability and damages impose a fine in some amount that when translated into its expected liability value ex ante will provide the firm with optimal incentives to obey the law.

A simple example illustrates the point. Assume that a firm's ex ante calculation of contemplated collusion in violation of antitrust law estimates that the illegal conduct will cause aggregate injury to consumers of $500 or $0, with a 50% chance of each outcome. As such, the average expected harm to the consumers is $250. Further assume that the firm will be appropriately deterred from engaging in illegal activity if it internalizes or expects to incur liability of $250. Finally assume that the firm anticipates that a court in the future will adjudge aggregate liability and damages by insisting on plaintiffs' establishing class-wide injury with ex post accuracy.

Now, suppose that the plaintiffs at great expense develop an econometric model that accurately determines class-wide injury of $500. Would the imposition of liability in that amount over-deter the firm that expected to cause harm of only $250 and would comply with the law if it expected liability of $250? Clearly, the answer is "no." Even though the ex post actual harm of $500 exceeds the ex ante expected harm of $250, the imposition of $500 aggregate liability and damages is fully consistent with the firm's ex ante expectation of doing $250 harm. The $500 sanction was anticipated with a 50% probability and therefore its imposition would not result in over-deterrence. Similarly, under-deterrence would not result from the imposition of no sanction if plaintiffs' econometric model, at great expense, determined $0 class-wide harm.

The example thus far shows that when courts pursue ex post accuracy, they are seeking an actual state of the world that is not inevitable, but rather only the play out of a distribution of probable outcomes. More importantly for present purposes, the best deterrence results are not a function of the actual state of the world that occurs or its accurate determination. Rather, the best deterrence results are a function of the defendant's expectations of bearing liability for the accurately determined state of the world that actually occurred. If, for example, the defendant discounted the chance of $0 harm, and assumed the low bound of harm would be $100, then the attempt to determine actual harm by means of an econometric model sufficiently sensitive to detect injury between $0-$100 might well be a waste of social resources, since the imposition of liability within that range would not affect the firm's incentives to comply with the law.

Now suppose that the firm anticipates that the court will pursue an accurate determination of class-wide harm with ex ante accuracy. In particular, the court will require plaintiffs' experts to stand in the firm's shoes at the time violation of the antitrust laws was contemplated. With information of the firm's calculations supplied by discovery, plaintiffs' expert might duplicate the econometric model developed by the defendant's experts in the past. Supposing the plaintiffs' model thereby generated common or generalized proof accurately determining that the firm expected to cause $250 in harm *on average*. On this basis the court could achieve the best deterrence result by imposing $250 in aggregate liability and damages, *regardless of the actual amount of class-wide harm that may have occurred ex post.* This "risk-based" assessment of aggregate liability and damages resembles the standard law enforcement option called a "Pigouvian" tax. See, A.C. Pigou, Wealth and Welfare 164 (1912). This measure of aggregate liability and damages has notable advantages over an ex post sanction measured by actual harm, including reduction in the chance that the firm may lack sufficient assets to pay full damages and may thus take greater risks in expectation of being judgment-proof. On the potential deterrence benefits of risk-based liability, see Rosenberg, Decoupling Deterrence and Compensation Functions in Mass Tort Class Action for Future Loss, 88 Va. L. Rev. 1871 (2002).

My assumption is that the cost for the parties and courts to accurately assess aggregate liability and damages from an ex ante, risk-based perspective will be lower, in part because of the data discovered from defendant's records, than the cost of making such an assessment from an ex post, actual harm perspective. The relative cost of using

one or the other of these approaches, that is, the relative degree to which one or the other is more cost-effective in providing common or generalized proof of defendant's aggregate liability and damages, may well vary across cases. Generally, it seems sensible to leave the choice to plaintiffs as they have strong incentives to proceed by the most efficient method.

In the end, however, the court still must test the reliability, accuracy, of the approach chosen and econometric model proffered by plaintiffs. In judging whether the proffered econometric model promises sufficient accuracy, ex post or ex ante, courts should heed two further lessons from deterrence theory that counsels against following recent trends in demanding technical precision and carrying out intense scrutiny pre-certification. First, the effectiveness of antitrust law enforcement, whether by public or private means, is necessarily a function of the cost of achieving various levels of deterrence. For discussion of how and why enforcement costs compromise deterrence objectives, see A. Mitchell Polinsky & Steven Shavell, Enforcement Costs and the Optimal Magnitude and Probability of Fines, 35 J.L. & Econ. 133 (1992). What courts should strive to do is make the optimal tradeoff of expected deterrence benefits, expected costs of generating proof to achieve them, and the costs of expected error in over- or under-deterrence.

Second, deterrence theory also counsels against stringently testing proffered econometric models out of concern that imprecise determination of the causation question of class-wide impact poses a significant risk of over-deterrence due to erroneously high assessments of the defendant's aggregate liability and damages. While courts should be concerned about over-deterrence just as they should be about under-deterrence, the danger of the former error is not as great as the danger from the latter. This asymmetry results from the nature of the liability rule in antitrust cases. That rule incorporates criminal law type subjective and circumscribed elements of scienter and anti-competitive conduct, which are designed to reduce a firm's uncertainty about whether its business decision will be judged illegal. Such rules justify courts spending less to assure accuracy that minimizes the chance of imposing excessive liability and damages and over-deterring the firm. Despite the potential for bearing too great a sanction, the firm will often not be over-deterred because it can simply obey the law with a high degree of confidence that its conception of obedience ex ante will be shared by the court ex post. On the deterrence effectives of uncertainty in determining causation and liability in general, see e.g., Rosenberg, The Causal Connection in Mass Exposure Cases: A "Public Law" Vision of the Tort System, 97 Harv. L. Rev. 849 (1984); Craswell & Calfee, Deterrence and Uncertain Legal Standards, 2 J. L., Econ., & Org. 279 (1986). This lesson from deterrence theory explains the acceptance of common or generalized proof of aggregate damage assessments in antitrust cases that "show[s] the extent of the damages as a matter of just and reasonable inference, although the result be only approximate." Story Parchment Co. v. Paterson Paper Co., 282 U.S. 555 (1931). See also Bigelow v. RKO Radio Pictures, 327 U.S. 251 (1946); Eastman Kodak Co. v. Southern Photo Materials Co., 273 U.S. 359 (1927).

The final part of this outline capitalizes on the lessons of deterrence theory to propose a simple, cheap, yet accurate means for determining the defendant's class-wide, aggregate liability and damages in a mass consumer class action and for distributing the damages in a way that will enhance everyone's well-being.

III. Proposal

The proposal stems from a set of reforms I have developed for improving the effectiveness of class action as a means of promoting optimal deterrence and insurance objectives of the legal system overall. Here I focus on the impediment to accomplishing those objectives through mass consumer antitrust class actions posed by the cost of determining class-wide aggregate liability and damages and of distributing any recovery of aggregate damages to enhance consumers' welfare. As briefly sketched below, I advance two reforms: a new method of sampling to determine class-wide aggregate liability and damages and a design for ex ante compensation of consumers by distributing aggregate damages (net of attorney fees and other costs) to Social Security.

A. New Method of Sampling

The key lesson from deterrence theory is that accuracy in the determination of aggregate liability and damages is a function of the prospective defendant's expectation of that determination. Thus ex post accuracy is a function of the firm's ex ante calculation of total expected cost of liability plus litigation ("total expected liability"). It follows, as was shown in the example above, that the threat to impose average aggregate liability and damages ex post serves deterrence objectives just as well as the more conventional threat to impose actual aggregate liability and damages. Under both regimes, the firm internalizes the same total expected liability and therefore has identical incentives to obey the law.

It was also observed above that deriving an accurate determination of average aggregate expected liability could be expensive if courts insist on econometric models that are sensitive to the variations in market and other factors that result in significant differences in the level of injury incurred by consumers. The greater the variation in injury among consumers, the greater the cost to construct a reliable econometric model, to generate common or generalized proof, and to pass muster under strict judicial scrutiny. Of course, firm's contemplating violation of antitrust laws and such cost impediments to detecting and sanctioning their violations, may well contrive on the margin to complicate market conditions as insurance against certification of a mass consumer class action.

The sampling method I propose can "accurately" determine a defendant aggregate liability and damages class-wide regardless of the degree, types, and causes of differences among claims. And it can do so consistent with deterrence theory and at a small fraction of the expense of developing and applying conventional econometric models. Moreover, use of the proposed method will eliminate the "blackmail" effect of subjecting the parties to a single, class-wide trial of aggregate liability and damages.

In short, the defendant's aggregate liability and damages for all claims in the class will be based on the outcomes of resolving (by settlement or judgment) some number of randomly selected claims. By this I mean that if the number sampled was 1, the outcome (as to both liability and damages) for that claim would determine the outcome for all claims in the class. If the number of claims sampled was 2, the outcomes for these two would be averaged, and that would be the outcome applied all claims in the class; and so forth. The defendant and class counsel would determine the number of claims to be sampled.

To illustrate, assume a class action alleging a price-fixing conspiracy by computer chip manufacturers and a class comprised of three sub-groupings of consumers – big businesses, small businesses, and individuals purchasing for personal use. For simplicity sake, assume that each grouping has one member – one big business, one small business, and one individual and that all defendants have settled except for firm A. Finally assume that the big business had sufficient market power to avoid incurring more than minor injury ($100), that the small business incurred moderate injury ($200), and that the individual suffered greater injury ($300). Compare the "accuracy" and cost of two regimes, the convention econometric method of sampling and my proposed method.

Conventional econometric methods would aim to account for the variations among the class members by means of technically sophisticated models that would estimate the existence and extent of the differences and then essentially cumulate the estimates (respectively weighted by the nature of the factors affecting the level of injury incurred by each) for each sub-grouping (here, for each of three differently situated class members) to arrive at a total estimate of class-wide aggregate liability and damages. In the process the model would require a great deal of group- / class-member specific information as well as heavy-duty analysis, computing, and, to defend its reliability, litigation. Supposing the court approved the econometric model as a reliable means for generating common or generalized proof of aggregate liability and damages, its application would result in an accurate determination of big business = $100 + small business = $200 + individual = $300 or aggregate liability and damages = $600. Assuming firm A's ex ante projection of aggregate liability and damages estimated injury to consumers respectively of $100, $200, and $300 or $600, application of the conventional econometric methods would achieve deterrence objectives, albeit at substantial cost.

Now suppose the court used my proposal. Before applying it, let me spell out its three steps with a little more specificity.

First step: The parties specify the number of claims for sampling;

Second step: The court randomly selects the party-designed number of claims from among the set of claims in question, each of which is then resolved in the normal course by judgment or settlement.

Third step: The defendant's aggregate liability and damages are determined by the court employing either of two alternative procedures depending on whether the number of claims selected was one or more than one: single claim sampling ("SCS") or average claim sampling ("ACS"):

1. SCS: *If one claim is randomly selected and resolved*, the court applies the resulting outcome – that is, the amount (if any) the plaintiff thereby recovers under judgment or settlement – as per force determinative of the outcome attributable to each and every claim against the defendant, selected and non-selected. In essence the court derives the defendant's aggregate liability and damages by multiplying the recovery from the sampled claim by the number of claims in the group, or

2. ACS: *If more than one claim is selected and resolved*, the court derives and applies the average of the resulting outcomes – that is, the average of the amounts (if any) thereby recovered from settlement or judgment by the plaintiffs on their respective claims – as perforce determinative of the outcomes attributable to each and every claim against the defendant, selected and non-selected. In essence the court derives the defendant's aggregate liability and damages by multiplying the average recovery from the sampled claims by the number of claims in the group.

Consider the example again. If the parties elect to sample one claim, the court would randomly select one of the three claims and resolve the selected claim in the normal course by judgment or settlement. Suppose the court the court randomly selected the big business claim and resolved it by trial or settlement for a recovery of $100. In that case firm A could be charged with aggregate liability and damages of $300 ($100 x 3 claims). Obviously, this amount is less than the total actual injury of $600 (which we know because it was assumed to set up the example, but which would not be known in reality). But, as noted above, the key to effective deterrence is firm A's total expected liability ex ante. Even though $300 aggregate liability and damages is less than Firm's total expected liability of $600, the proposal nevertheless works to provide firm A with optimal incentives to obey the law. Thus, under my proposal, as under a regime using the conventional econometric model, firm A internalizes the optimal amount of total expected liability: $600 (or the sum of the three expected outcomes from random sampling by my method: 1/3 x $300 ($100 x 3 claims) + 1/3 x $600 ($200 x 3 claims) + 1/3 x $900 ($300 x 3 claims)). Because each claim is determined on an individual basis, there is no need for sophisticated econometric models to account for the variations among claims.

Of course, the court could proceed under my proposal to randomly select the individual claim with the result that the defendant would bear aggregate liability and damages of $900, which exceeds the actual amount by a considerable degree. But, as noted above, this outcome was contemplated by firm A ex ante, and so, in principle, assessing the far greater amount of aggregate liability and damages would not distort the

firm's incentives to obey the law. Finally, note that the cost of applying SCS relates to resolving one, randomly selected claim, and does not include the cost of resolving or estimating the portion of aggregate liability and damages that might be attributed to any other claim.

Yet, as suggested by the random selection of the high-value individual claim, the proposal can increase risks for parties, since their treatment rides on the outcomes of the sample. Class counsel might well be risk averse and therefore incur substantial risk-bearing cost were they to face a single trial with the potential of recovering only $300 rather than $600. Similarly, if risk averse, firm A might incur substantial risk-bearing cost were it to face a singe trial with the potential for paying $900 rather than $600. But, in contrast to conventional class action procedure, the parties are not compelled to hazard their fortunes on a single trial. The parties can readily reduce the risk to any level that suits their preferences by having the court conduct wider-sampling under the ACS alternative of the proposal. By having two claims selected the parties reduce the chance of the worrisome outlier result from one-third to one-ninth while the chance of the mean result remains at one-third and the greater than one-third balance of outcomes clusters around the mean. In reality, the number of claims would be far higher and therefore risk-bearing cost would be far more significant. However, even sampling 15 or 20 claims from a class of tens of thousands can eliminate an enormous amount of risk.

Thus, the crucially important feature of the proposal is that the decision regarding the number of claims to be sampled is placed entirely in the hands of the litigants – the best informed as well as appropriately motivated principals in the system to make such determinations. In seeking maximum benefit from litigation, the parties can choose any number needed to reduce risk-bearing cost as well as tangible litigation cost. As such the proposal will improve the well-being of the parties – because it will be used only to the extent they choose to use it, which I argue that they will often want to do – and it is not difficult to implement.

It might be thought that the proposed sampling method would defeat the efficiencies of class action since to reduce risk-bearing costs the parties might elect to sample many separate claims. Much of the possible cost of 50 or more trials would be saved in part by virtue of scale economies; but great savings would also accrue by virtue of settlement. The parties would have strong incentive to resolve the selected claims and thereby all claims by settlement, and far stronger incentive to settle the class action before commencing the sampling process. However, even if the class action devolved into 20 or 30 trials, the main benefit of class action remains undiminished. By virtue of class action the plaintiffs' have the same opportunity as defendant to fully exploit available scale economies. This result corrects the systemic bias skewing civil liability on average in favor of defendants and consequently distorting deterrence effects in the direction of higher risk of illegal conduct. In the antitrust context, this systemic bias means essentially that the great mass of consumer claims will fail by default.

B. Distributing Aggregate Damages to Social Security

The proposal in essence would have courts pay over aggregate damages recovered by judgment or settlement in mass consumer class actions directly to Social Security. Deductions would be made from the allocated amount to pay attorneys' fees and costs and court costs. This process would produce great social benefit by improving deterrence results as well as providing lower cost and more valuable compensation. Deterrence would be improved because class counsel could avoid spending large amounts on distributing damages among class members, and thus could devote more resources to proving defendant's aggregate liability and damages.

Compensation would be improved too by adopting this proposal for what is commonly called "ex ante compensation." As noted, there would be huge savings in the cost of distributing damages, which typically eats up a large fraction of the very small per claim payments and leads to a very small fraction of class members ever even filing claim forms to receive payments.

But there are further advantages to paying over aggregate damages to Social Security (or some other social insurance system such as Medicare and Medicaid). On the realistic assumption that consumers are risk-averse and in need of more health and accident insurance such as that provided by Social Security, paying over aggregate damages to such a social insurance system will increase the average level of their coverage for the high magnitude losses, which, as public choices and market preferences indicate, people fear most. Cf. Insurance subrogation; Reinker & Rosenberg, Unlimited Subrogation: Improving Medical Malpractice Liability by Allowing Insurers to Take Charge, 36 J. Legal Studies 261 (2007). On the unrealistic assumption that consumers though risk-averse do not need more health and accident insurance, the payment of aggregate damages to Social Security should result in lower taxes and hence more money in the pockets of the consumers. Being risk-averse, they prefer ex ante compensation to distribution of damages at the close of a class action – ex post compensation. This preference exists not only because the latter, ex post compensation involves higher cost that thereby provides lower per claim payments compared to the value of the payouts from ex ante compensation. But it is also because risk-averse individuals prefer to have in hand with certainty the expected value of a litigation gamble rather than to take the chance on receiving more or less from a class action distribution.

But, if individuals are not in need of more insurance coverage, then exactly what is meant by compensation delivered "ex ante," that is, what exactly is being "compensated"? In essence, paying over aggregate damages into Social Security effectively pays every consumer or member of society an average amount equal to the average risk of being victimized by an antitrust violation. It is true that some individuals are apt to lose more than others, but unless there is something innate in their purchasing behavior that leads some to be victimized more often or to a greater extent than others, the average payoff suffices to negate the average risk.

Now, wealthier and business purchasers may be less likely to fall victim to antitrust violations, or at least some types of illegality. Consequently such purchasers may receive higher payments ex ante than their actual risk. There are several responses to this apparent problem. First, we are not talking about large amounts of overpayment; certainly the overpayments under the proposal for ex ante compensation are miniscule compared to the overpayments in standard product liability cases where consumers pay roughly the same price for a product – essentially the same "tort premium" – while, in the event the product turns out to be defective, tort pays plaintiffs differentially according to their losses of income and income earning capacity. Second, the deterrence priority discussed above, counsels against spending resources to tailor ex ante payments to consumers' actual risk profiles. Indeed, this is the clear lesson of *Illinois Brick* and *Hanover Shoe* in precluding application of both offensive and defensive pass-on offsets.

Illinois Brick, supra:

> It is true that, in elevating direct purchasers to a preferred position as private attorneys general, the Hanover Shoe rule denies recovery to those indirect purchasers who may have been actually injured by antitrust violations. Of course, as Mr. Justice BRENNAN points out in dissent, "from the deterrence standpoint, it is irrelevant to whom damages are paid, so long as some one redresses the violation." But s 4 has another purpose in addition to deterring violators and depriving them of "the fruits of their illegality," Hanover Shoe, 392 U.S., at 494, 88 S.Ct., at 2232; it is also designed to compensate victims of antitrust violations for their injuries. E. g., Brunswick Corp. v. Pueblo Bowl-O-Mat, Inc., 429 U.S. 477, 485-486, 97 S.Ct. 690, 695-696, 50 L.Ed.2d 701 (1977). Hanover Shoe does further the goal of compensation to the extent that the direct purchaser absorbs at least some and often most of the overcharge. In view of the considerations supporting the Hanover Shoe rule, we are unwilling to carry the compensation principle to its logical extreme by attempting to allocate damages among all "those within the defendant's chain of distribution," especially because we question the extent to which such an attempt would make individual victims whole for actual injuries suffered rather than simply depleting the overall recovery in litigation over pass-on issues. Many of the indirect purchasers barred from asserting pass-on claims under the Hanover Shoe rule have such a small stake in the lawsuit that even if they were to recover as part of a class, only a small fraction would be likely to come forward to collect their damages. And given the difficulty of ascertaining the amount absorbed by any particular indirect purchaser, there is little basis for believing that the amount of the recovery would reflect the actual injury suffered.

Finally, over the long-run, any significant variation among consumers in bearing the risk of being victimized by antitrust violations will diminish and eventually disappear. As people are born into the system, the population will become more and more akin to that comprised by individuals "behind a veil of ignorance," who do not know their

respective fates in terms of propensity to suffer harm from an antitrust violation.

While I have advocated that all non-contract, civil liability recoveries from tort and otherwise – with some exceptions notably in the area of employment discrimination – should be paid over to Social Security, the proposal may have more traction in the antitrust context. Congress has expressly provided for such escheat methods of distributing damages awarded in a parens patriae action under §4 of the Clayton Act. As the Court in *Illinois Brick* noted, many potential claimants will forego seeking a share of aggregate damages because of the small injuries and resulting small recoveries involved, and hence "the undistributed portion of the fund … will often be substantial." To deal with this compensation problem, Congress provided aggregate damages not used to compensate actual injuries of antitrust victims should be used as "a civil penalty … victims is to be used as "a civil penalty . . . deposited with the State as general revenues," or "for some public purposes benefiting, as closely as possible, the class of injured persons," such as reducing the price of the overcharged goods in future sales. And, as *Illinois Brick* and *Hanover Shoe* show, courts have themselves designed the system to render compensation more valuable without compromising the priority for deterrence.