CAN SUITS WITH NEGATIVE EXPECTED VALUE REALLY BE PROFITABLE?*

Defendants Can Play Games Too

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I. INTRODUCTION

This is the second of two closely related articles¹ challenging the widely held belief that plaintiffs, through the settlement process, are realizing "too much" from "unmeritorious" claims. No one has offered a systematic justification for this belief. It appears, however, to be based upon the effects produced by three characteristics of the settlement process: (1) the outcome of litigation is uncertain; (2) when, as in a class action, the stakes are very high for a defendant, the defendant will be very risk-averse and will consequently be prepared to pay in settlement much more than the expected value of its liability; and (3) litigation is costly.

The first article focused on the normative implications of the first two of these phenomena. In particular, it asked whether either of them supported the claim that plaintiffs were realizing "too much" by settlement of "unmeritorious" cases. It responded to two normative contentions that have been advanced to establish the social undesirability of the outcomes being achieved by plaintiffs through settlement: (1) when, as in class actions, the case for a defendant has an "all or nothing" quality because the success of many claims will be determined by the outcome of one litigation, plaintiff will be able "improperly" to exploit the large amount of risk aversion, which will cause defendant to be willing to pay in settlement much more than the

*I wish to acknowledge my debt to Kevin Lippert for his important contribution to the writing of this article. Kevin, a student in my Law and Economics workshop, wrote a thoughtful paper evaluating the theoretical argument advanced by David Rosenberg and Steven Shavell in their: *A Model in which Suits Are Brought for Their Nuisance Value*, 5 INT'L REV. L. & ECON. 3 (1985). (The paper was jointly awarded the prize for the best student paper in the workshop). My discussions with Kevin during the course of the semester were largely responsible for my decision to write this article. Moreover, Kevin's paper is the source of important inputs into my analysis of the Rosenberg and Shavell arguments.

1. The first is Warren F. Schwartz, Long-Shot Class Actions: Toward a Normative Theory of Legal Uncertainty, 8 LEGAL THEORY 297 (2002).

expected value of its liability; and (2) when the uncertainty of the outcome is such that plaintiff is far more likely to lose than win, plaintiff should not be able to exploit her small chance of prevailing to secure a substantial settlement, particularly if extreme risk aversion greatly increases the importance of the small risk of losing in defendant's settlement calculation.

The first article challenged both of these normative conclusions. The present article takes up the third strand of the theoretical justification for the belief that plaintiffs are realizing "too much" through settlement. It is clear that the focus of this theoretical contention is the costliness of litigation to a defendant. The animating concern is that plaintiff may be able to exploit defendant's desire to avoid incurring litigation costs to obtain a settlement, even though plaintiff is unlikely to win if the case is litigated to a conclusion. What precisely is being claimed, however, is obscure.

Indeed, the framework of this analysis is, itself, puzzling. The inquiry is whether there are suits that plaintiffs would not bring if they could recover only by litigating the case to a conclusion because expected litigation costs exceed the expected value of plaintiff's claim. Suits of this kind are designated as having "negative expected value."²

It is, however, by no means clear why anyone would or should care if a suit has "negative expected value." Why should the benchmark for positive or normative analysis be whether the case would be profitable for plaintiff if it were litigated to a conclusion? After all, the great majority of cases are settled. Moreover, the principal motive for settlement is the mutual desire of the parties to avoid incurring litigation costs. If you will, neither wants to litigate the case to a conclusion. By settling, the plaintiff

2. The articles claiming that negative-expected-value suits can be profitable are all theoretical. None offer empirical support for the claim. To be fair, however, empirical investigation that would authoritatively reject or confirm the hypothesis that such claims exist and, if so, in what quantity, is virtually impossible. The key factor in successfully maintaining a negativeexpected-value suit is the ability to make a credible threat to do something you would prefer not to do. To be successful it is necessary that you do not have to do what you threaten to do. Consequently, if the strategy is to be successful, the threat is not carried out. Similarly, the defendant, by settling, escapes the costs she would have to incur if the threat were carried out. Thus the important events are things that are anticipated but that never occur. There is consequently no reliable evidence of the expectations that underlie the parties' decision to settle.

The evidence with respect to litigation events that do occur can be interpreted to provide indirect refutation of the claim that negative-expected-value suits may be profitable. A number of studies strongly suggest that with respect to discovery, a major component of the litigation process, the decision to conduct discovery is based on a rational comparison of the costs and benefits of securing the information. If this is the predominant motive, it weakens the inference that discovery is threatened with the objective of increasing the amount the other party will pay in settlement and the hope that it will not actually have to be conducted. However, it is impossible with any confidence to interpret threats based on evidence concerning the actual occurrence of what is threatened. The instances of "efficient" discovery may simply be those in which the party seeking discovery was not behaving strategically. On the other hand, you would expect that the no settlement occurs. If this were the case, there would be instances in which "inefficient" discovery was actually conducted. The relevant empirical studies are reviewed in Charles Silver, *Does Civil Justice Cost Too Much?*, 80 TEXAS L. REV. 2073, 2093–2098 (2002).

not only can avoid incurring its litigation costs but also can capture some portion of defendant's cost savings realized by settlement. Similarly, settlement permits defendant to avoid incurring litigation costs and to capture a portion of plaintiff's cost savings. Hence it is not clear why, if settlement is the usual outcome—particularly since settlement permits both parties to avoid incurring litigation costs—the question of whether plaintiff would bring the case on the assumption that it could not be settled is worth asking.

Lucien Bebchuk, in his essay reviewing the literature concerning negativeexpected-value suits, provides the following explanation of the normative significance of the "negative expected value" literature:

I wish to highlight the fact that the literature this essay surveys has largely focused on positive analysis-on understanding the conditions under which Negative Expected Value suits will be brought and succeed. The conclusion that this literature has reached-that NEV plaintiffs can in many cases succeed in extracting a settlement-suggests that the threat of using legal sanctions can provide plaintiffs with recovery in a larger set of circumstances than had been recognized earlier. This feature of the legal system might sometimes have beneficial consequences and sometimes undesirable ones. With respect to NEV suits that are meritorious (and are NEV simply because the required litigation costs would be large relative to the amount at stake), a NEV plaintiff's ability to extract a settlement offer might well be beneficial. In contrast, with respect to NEV suits that are frivolous, a NEV plaintiff's ability to extract a settlement offer might well have undesirable consequences. Now that we have obtained some substantial understanding concerning when NEV suits can succeed, the challenge for future work in this area is to design rules and policies that would produce as close a correlation as possible between the success and merits of NEV suits.³

I believe, however, that this passage does not establish that the negativeexpected-value literature has any normative significance. There is no suggestion that the strategies that may make it possible for a plaintiff profitably to maintain a negative-expected-value suit are themselves objectionable. Indeed, it asserts that these strategies are socially desirable when they make it possible for a plaintiff to bring a "meritorious" case that could not otherwise be brought "because the required litigation costs would be large relative to the amount at stake." The strategies are socially undesirable only when "they permit a positive settlement for suits that are frivolous." Everything then, turns on whether the suit is characterized as "meritorious" or "frivolous." The passage does not, however, specify what is meant by "meritorious" or "frivolous." Presumably, a case that plaintiff has no chance of winning is "frivolous" and one plaintiff is certain to win is "meritorious." But what of

^{3.} Lucian Arye Bebchuk, *Suits with Negative Expected Value* 3 PALGRAVE DICTIONARY OF ECO-NOMICS AND THE LAW 551, 554 (1998).

the great majority of cases where there is *some* likelihood that plaintiff will prevail. Where is the line between the frivolous and the meritorious to be drawn? How and when is it to be drawn? Even if these questions could be satisfactorily answered, the concept of a negative-expected-value suit serves no useful normative purpose. Presumably if a suit is frivolous, *everything* that is done that enables plaintiff to achieve a positive settlement is socially undesirable. On the other hand, in the words of that wonderful song, if the suit is meritorious, but unprofitable, "anything goes."

If the negative-expected-value analysis were to be normatively useful, it would have to help answer subtle and difficult questions. All of the strategies that might make a negative-expected-value suit profitable for a plaintiff have the characteristic of plaintiff increasing the maximum amount a defendant will pay in settlement by making a credible threat to impose costs on defendant even when the expenditure required actually to impose the costs on defendant would not be profitable for plaintiff. Symmetrically, formally identical strategies by defendant can be employed to reduce the minimum amount a plaintiff will be prepared to accept in settlement. The interesting question is whether, in some meaningful sense, the litigation process could be improved by constraining the use of these strategies. A nascent notion of wasteful expenditures, or what is sometimes called rent dissipation, seems to be lurking somewhere beneath the surface. I can see no normative point to the negative-expected-value literature unless these ideas can be developed as a basis for limiting or eliminating certain strategies whether they are used in "good" cases or "bad" ones.

The present article, unlike the first, is essentially positive. It challenges the conclusions implied by the positive analysis in the negative-expected-value literature. I believe that this analysis exaggerates what a plaintiff can accomplish by employing the strategies claimed to make negative-expected-value suits profitable. Even more importantly, perhaps, it ignores the ability of a defendant to employ formally identical strategies to reduce the amount a plaintiff is willing to accept in settlement. These strategies can be employed by a defendant whether a plaintiff would in their absence have a negative or positive-expected-value suit. It is thus possible that a plaintiff with a positive-expected-value suit will be deterred from initiating it because she anticipates that defendant, by employing one of these strategies, will be able to reduce the amount she can realize in settlement by so much that the suit is not profitable. For both of these reasons, the conclusion that the existence of these strategies benefits plaintiffs to the extent necessary to make negative-expected-value suits profitable is a very doubtful one. Indeed my best estimate (there is no evidence as to the efficacy of these strategies as employed by plaintiffs or defendants) is that defendants can employ them to achieve a greater reduction in the amounts plaintiffs are prepared to accept in settlement than the increase in the amount defendants are prepared to pay in settlement which plaintiffs can achieve by employing the same strategies. Of course, in deciding whether using a strategy can make a negative-expected-value suit profitable, it is necessary to consider what both parties can achieve by employing the particular strategy.

I analyze the three most important strategies claimed to make it possible for a plaintiff to maintain a negative-expected-value suit profitably. I identify important possibilities, ignored in the formal models, which serve materially to reduce the profitably of the strategy to a plaintiff. I then consider how the strategy might be employed by a defendant to reduce the amount a plaintiff is prepared to accept in settlement.

II. STRATEGY 1

By agreeing to a settlement plaintiff captures a portion of the costs defendant would otherwise have to incur to call plaintiff's bluff.

The story, as told by Rosenberg and Shavell⁴ is this. Plaintiff, at very modest cost, files a complaint. It would not be profitable for plaintiff to litigate the case to a conclusion because plaintiff's costs would exceed the expected value of plaintiff's recovery. (This could be so even if plaintiff were certain to win.) After the complaint is filed, defendant faces the risk of having a default judgment entered if she does nothing to prevent this from happening. The costs to plaintiff of securing a default judgment (much less, of course, than the costs of litigating the case to a conclusion) are less than the amount that would be secured by obtaining a default judgment. Hence plaintiff's threat to secure a default judgment, if defendant does nothing to prevent it, is credible.

As the situation is modeled, since the costs to plaintiff of preparing the complaint and securing a default judgment are less than the costs to defendant of avoiding entry of a default judgment, defendant would be better off settling for any amount less than the costs of avoiding entry of a default judgment. Plaintiff can realize a profit equal to the difference between the costs of preparing a complaint and the amount paid by defendant in settlement.

I believe that this story, even accepting all the assumptions of the model, creates an exaggerated impression of how effective a strategy this is for plaintiff.⁵ To begin with, if it succeeds plaintiff receives nothing for the value of defendant's expected liability and anticipated litigation costs, other than those costs necessary to avoid entry of a default judgment. The maximum "pot of gold" is the difference between plaintiff's costs of preparing a complaint and defendant's costs of preventing entry of a default judgment. It is, moreover, uncertain how much of this small amount plaintiff can capture. If the case, indeed, has negative expected value, plaintiff would be

4. See supra, N.

5. Avery Katz, *The Effect of Frivolous Lawsuits on the Settlement of Litigation*, 10 INT'L REV. L. & ECON. 3, 4 (1990), briefly but cogently makes many of the same criticisms of the Rosenberg and Shavell analysis as I do. Bebchuck's survey essay presents the Rosenberg and Shavell thesis but omits Katz's criticism of it.

better off accepting any amount offered by defendant in settlement. Thus the bottom of the bargaining range is anything more than zero. As a result, for plaintiff to be willing to employ the strategy, plaintiff must believe that, on average, the amount that will actually be realized through settlement is greater than the costs of preparing the complaint.⁶ Moreover, since the costs are incurred with certainty and the amount recovered through settlement is uncertain, for the strategy to be profitable the average return has to be sufficient to compensate plaintiff for the risk as to what will actually be recovered. In sum then, even if the assumptions of the model are taken to be true, this strategy is unlikely to yield large profits for a plaintiff.

I believe, moreover, that the key assumption of the model is unlikely to be true. The source of any payment plaintiff might secure in settlement is defendant's costs of avoiding the entry of a default judgment. In fact, however, these costs are very low. All defendant needs to do is to file an answer denying allegations of the complaint. Defendant is not required, at this point in the litigation, to offer any proof that the allegations of the complaint are, in fact, false. Consistent with the overall conception of the rules of civil procedure, defendant is required to prove its case only after plaintiff has made a substantial showing that it has a case. Avoidance of a default judgment, in which plaintiff can prevail by making a minimal showing, is made very cheap for a defendant. It is therefore unlikely that these costs exceed by any substantial amount plaintiff's costs of preparing a complaint.

It is also important to realize that formally identical tactics to those posited for plaintiff can be employed by defendant in preparing its answer. Indeed, I believe that these tactics can yield far more profit for defendant by filing an answer than for a plaintiff by filing a compliant. By answering, defendant obliges plaintiff to recover by obtaining a judgment in a costly contested proceeding rather than through the low-cost path of securing a default judgment. What plaintiff must do is to incur sufficient costs to obtain a judgment if defendant does nothing to respond. Assume, consistent with the model posited for plaintiff, that if plaintiff incurred these costs, defendant would have a negative-expected-value defense and would therefore surrender so that plaintiff could obtain a judgment. It would still be the case that the minimum amount plaintiff would be prepared to accept in settlement would be reduced by the amount of costs plaintiff would have to incur to call defendant's bluff. The situation is symmetrical for plaintiff and defendant. Plaintiff can employ the posited strategy to increase the amount defendant is willing to pay in settlement. Defendant can employ the strategy to reduce the minimum amount plaintiff will accept in settlement. A priori, it is not possible to say which negative-expected-value strategy will be more important in determining the settlement outcome.

6. Katz, *supra* note 5, points out that Rosenberg and Shavell assume this problem away by conferring on plaintiff the ability to make a take-it-or-leave-it offer.

I believe, however, that in fact much more can be achieved by a defendant. At bottom, this is because the rules of procedure reflect the conception that defendant need not bear litigation costs until plaintiff makes a substantial showing that its case is well founded. I buttress this conjecture by continuing our story to the later stages of the litigation, after defendant has filed an answer. To recover, plaintiff must either obtain a summary judgment or prevail at trial. Imagine the polar case in which if plaintiff files a motion for summary judgment, defendant will surrender. At the least the minimum amount that plaintiff will accept in settlement will be reduced by plaintiff's costs of making the motion, even if plaintiff were certain that defendant would not oppose the motion. I believe that across all cases, the costs for plaintiff of securing a judgment, other than through default, are greater than the costs for defendant to avoid entry of a default judgment.

Plaintiff's cost of making the motion for summary judgment would be even higher if plaintiff were uncertain whether defendant would attempt to defeat the motion or surrender. Later I consider the general question of the importance of uncertainty to the effectiveness of negative-expected-value strategies by plaintiffs and defendants. At this point I simply note that if the plaintiff is uncertain whether defendant will oppose a motion for summary judgment, defendant can obtain a greater reduction in the amount plaintiff will accept in settlement by filing an answer, even though defendant in fact will surrender if plaintiff moves for summary judgment.

III. STRATEGY 2

If plaintiffs have private information concerning the extent of their injuries, which it is excessively costly for a defendant to obtain, defendant's best strategy may be to make the same positive offer to all defendants. Those plaintiff's whose injuries are too low relative to litigation costs for their cases to have positive expected value accept the offer, and defendant goes to trial with those plaintiffs whose cases have positive expected value. Alternatively defendant may make no offer to any of the plaintiffs. Those plaintiffs with negative-expected-value claims abandon the litigations. The claims that have positive expected value are litigated.

The story (in slightly modified form) as told by Avery Katz⁷ is as follows. Defendant manufactures a product. There is a substantial probability, but not a certainty, that the product will be determined to be "defective" and defendant held liable for harm to purchasers resulting from its use. There are two types of users: (1) those whose injuries are too small (including those users not really injured at all) to make a suit for damages profitable, given the costs of litigation and the possibility that defendant will not be held liable—these are the potential plaintiffs with negative-expected-value

7. See supra note 5.

cases; and (2) those whose injuries are sufficiently great to make a suit for damages profitable despite the litigation costs that must be incurred and the possibility that defendant will be exonerated—these are the potential plaintiffs with positive-expected-value suits.

Katz considers the complex decision a defendant must make in choosing between two possible responses to this situation: (1) offer nothing to all plaintiffs-the plaintiffs with negative-expected-value suits will abandon their claims, and defendant will go to trial with those plaintiffs who have positive-expected-value cases; (2) offer the same positive settlement to all plaintiffs-the offer will be accepted by all plaintiffs with negative-expectedvalue suits and some plaintiffs with positive-expected-value suits. The offer is set so as to minimize the sum of (1) litigation costs with plaintiffs who have positive-expected-value suits and reject the offer; and (2) the amount paid in settlement to plaintiffs with negative-expected-value suits. The number of people who sue despite having negative-expected-value suits depends on their expectations as to how much defendant will offer. Thus a defendant's optimum settlement offer involves a trade-off between lowering the offer to reduce the number of people with negative-expected-value suits who sue and raising it to increase the number of plaintiffs with positive-expectedvalue suits who settle rather than litigate. The best that can be done by making this trade-off may be inferior to the first strategy of offering nothing in settlement. This first strategy avoids paying anything to plaintiffs with negative-expected-value suits at the cost of litigating with all plaintiffs who have positive-expected-value suits.

I have no quarrel with this positive analysis, given the assumptions and exclusions of the model. I cannot resist noting, however, that Katz makes the normative mistake that seems to lurk below the surface of much of the negative-expected-value suit literature. He equates the negative-expectedvalue suit with the "frivolous" suit. It is clear, however, that in the offernothing-in-settlement equilibrium, people who have been injured, but not seriously enough to make litigation profitable, recover nothing.

I do, however, take issue with the failure formally to analyze a third possible strategy for defendant which, like the first of the two equilibrium strategies analyzed, would lead to people with negative-value-suits recovering nothing. The alternatives that are considered involve making the same offer to all plaintiffs. The question considered is whether that offer should be nothing or some positive amount.

The third strategy a defendant could employ is to incur costs to distinguish among plaintiffs and offer a positive amount in settlement to a plaintiff who with some high probability has a positive-expected-value case and nothing to a plaintiff who is thought to have little chance of having a positive-expectedvalue claim.

The question of whether to choose a one-price-for-all strategy or to incur the costs of differentiating among claimants is very much like the question of whether to employ an objective or subjective negligence standard. The

reasonable person standard requires that everyone take the same amount of care to avoid liability without regard to how costly it is for the particular person to take care. People manifest their individual characteristics by their responses to the universally applicable standard. Implementation of a subjective standard requires that the costliness of taking care be determined for each defendant. If a subjective standard is employed, the court must determine the relevant characteristics of the defendant and fashion a rule appropriate for a person with these characteristics. Each of these strategies requires costly information for its implementation. If a single standard is employed, it is necessary to know the distribution of the relevant characteristic in the population whose conduct will be governed by the standard. It is, however, unnecessary to know the characteristics of any particular member of the population. If a different standard is applied to persons who vary in the relevant characteristic, the characteristic of each person must be determined. It is, however, not necessary to determine the distribution of the characteristic in the entire population. It is not possible to say, a priori, which method for devising a governing standard is less costly.

The equivalent issue in the situation considered by Katz is whether it is better to make the same offer to all plaintiffs and rely on their responses as the means for distinguishing those with negative-expected-value suits from those with positive-expected-value suits or to determine directly whether a plaintiff has a negative- or positive-expected-value suit and make a positive settlement offer to those with positive-expected-value claims and offer nothing to those with negative-expected-value claims.

Katz dismisses without formal analysis the possibility of directly distinguishing among plaintiffs because "complete information is likely to be prohibitively costly." If by "complete information" is meant information so extensive that a defendant never errs in deciding whether a plaintiff has a negative- or positive-expected-value claim, it is no doubt prohibitively costly. It is, however, not necessary for this process to be error-free in order for it to be superior to the two strategies that Katz does analyze. Recall that each of the two strategies analyzed by Katz requires that the same offer be made to all plaintiffs. The choice is between a positive offer or no offer. The objective is: (1) to pay as little as possible to plaintiffs with negative-expected-value claims; and (2) to settle, rather than litigate, with as many plaintiffs as possible who have positive-expected-value claims. Whether a positive offer or no offer is preferable depends on the distribution of positive- and negativeexpected-value claims in the plaintiff class. Neither of these "same offer to all plaintiffs" strategies perfectly accomplishes the objectives underlying their use.

Distinguishing among plaintiffs' claims accomplishes both of the objectives underlying the two strategies that Katz does analyze: (1) litigation with plaintiffs who have positive-expected-value suits is avoided, and (2) nothing is paid to plaintiffs with negative-expected-value claims. It is true that against these gains must be balanced the sum of the costs of distinguishing among plaintiffs and the error costs when mistakes are made in doing this. However, it is by no means obvious that if a defendant expends an optimum sum in acquiring information so as to minimize the sum of expenditures and error costs, at least in some circumstances, this strategy will not be superior to the two that are analyzed.

There are two reasons why this is likely to be so. First, the discovery opportunities provided by modern procedure can be fairly characterized as powerful means of forcing parties to divulge private information. In the hypothetical case under consideration, whether plaintiff has a positive- or negative-expected-value suit depends on the extent of her injuries. Interrogatories, depositions, and requirements to produce copies of documents such as medical records provide very effective means for a defendant to determine the severity of plaintiff's injury. Indeed the required separation between positive- and negative-expected-value suits could often be made by the simple and cheap request to provide copies of the medical records concerning plaintiff's injuries.

The second reason why this strategy may be effective is that defendant and those plaintiffs who have positive-expected-value suits have a shared interest in settling rather than litigating. Defendant wants to identify those plaintiffs who have positive expected-value claims and those plaintiffs want to be identified. (Katz makes two assumptions that reduce the importance of this identity of interest: (1) defendant rather than plaintiff makes the offer so "that information regarding the plaintiff's type is conveyed only by the fact of suit and not by the amount of the offer; and (2) "that an injured plaintiff cannot credibly commit the validity of his claim to the defendant before trial.")

In simple terms, I have difficulty believing that a plaintiff and a defendant with a shared interest in avoiding the costs of trial cannot figure out a way to make defendant believe that the expected value of plaintiff's claim is large enough that plaintiff will if necessary go to trial. Moreover, they need to do this at only a cost that is less than the joint litigation costs if the case is tried. It would also seem that a plaintiff who refuses to cooperate in this process sends a strong signal that she has a negative-expected-value claim.

The discussion in this section may be summarized as follows. In only one of the two strategies considered by Katz do plaintiffs with negative-expected-value suits recover anything in settlement. Some of those who receive nothing have in fact been injured, but insufficiently to make litigation profitable. In the third strategy I propose, plaintiffs with negative-expected-value suits receive nothing. Indeed if they anticipate this strategy by defendant—unless defendant makes sufficient errors in concluding that what is really a negative-expected-value suit has sufficient positive expected value to make litigation profitable—plaintiffs with negative-expected-value suits will not initiate litigation. This does not mean that defendant can avoid the costs of distinguishing between types of suits by simply assuming that only suits with positive expected value will be brought. If defendant did this, the result would be

that many suits with negative expected value would be brought. The deterrent effect of the distinguishing strategy will, however, reduce defendant's costs because there will be fewer cases that will need to be determined to have negative or positive expected value.

It is also important to take into account how costly it would be for a defendant to employ the two strategies analyzed by Katz. Either may constitute an equilibrium depending principally on the mix of positive- and negativeexpected-value claims in the pool of potential suits. Defendant learns what this pool is by inference from the suits that are actually brought. This learning process is likely to be costly. Until equilibrium is reached, defendant will pay more in total settlement to plaintiffs with negative-expected-value suits and litigation costs for trials with plaintiffs who have claims with positive expected value than will be the case when the equilibrium solution is achieved. Since the driving force shaping defendant's choice between the two strategies is the behavior of individuals in initiating suit, at the outset the defendant has no basis for deciding which strategy to employ. If the choice is the one that, given the mix of potential claims, does not constitute an equilibrium, the path to the equilibrium solution may be a very costly one. In deciding whether to employ one or the other of the strategies analyzed by Katz or the one I propose, a defendant must, of course, consider not only the costs of distinguishing among plaintiffs if my proposal is employed but also the costs of reaching an equilibrium solution using one or the other of the strategies considered by Katz.

Once again, if plaintiff's private information about the profitability of her claim provides the foundation for a strategy that induces defendant sometimes to make a positive payment to a plaintiff in settlement of a claim with negative expected value, a formally identical strategy can be employed by defendant to induce a plaintiff to reduce the amount she will accept in settlement.

The following example may be helpful in understanding this point. Plaintiff sues under the antitrust laws. The governing rule is the so-called rule of reason. Even if defendant's conduct would otherwise be held to be illegal, defendant will be exonerated if the challenged conduct yields a sufficient quantity of efficiency. Defendant pleads the available efficiency defense. Defendant has private knowledge of facts that determine whether the defense has negative or positive expected value.

Plaintiff faces the same problem as does defendant in Katz's analysis. Plaintiff wants to minimize the sum of the costs of accepting less from a defendant who would abandon the defense if obliged to prove it and litigation costs in a trial of the defense if defendant would be prepared to bear the necessary litigation costs if obliged to do so. A plaintiff is actually in a worse position to do this than a defendant. Under Katz's solution, defendant is driven to the efficient equilibrium by the behavior of people in choosing to sue or not to sue. By contrast a defendant has been sued and it is virtually costless for the defendant to plead a negative-expected-value defense. The prediction is that a negative-expected-value defense will be pleaded frequently, if not always. Plaintiff will have no choice but to bear the costs of distinguishing defendants with negative-value defenses from those with positive value or to make the same offer to all defendants with little guidance as to what the offer should be. Thus the possibility of a defendant pleading a negativeexpected-value defense systematically reduces the profitability of litigation for plaintiffs.

My bottom line is that possession of private information concerning the expected value of a claim or defense cannot provide the foundation for a large aggregate recovery by plaintiffs with negative-expected-value suits. Only one of the three possible strategies that defendants might employ results in negative-expected-value plaintiffs recovering any amount in settlement. At the same time, the prospects of defendants paying less in the aggregate in settlement because they have private information concerning the expected value of defenses they might assert seem much brighter. So if, returning to the question that motivated this article, plaintiffs are realizing "too much" in settlement, the villain in the story is not private information.

IV. STRATEGY 3

Plaintiff may be able to incur costs that, after they are incurred, will be ignored in plaintiff's future settlement determinations. After the costs are incurred, what was initially a case with negative expected value becomes one with positive expected value. Anticipating that plaintiff can do this, defendant is prepared to settle before plaintiff actually incurs the costs. Plaintiff actually incurs only the costs of initiating the suit and realizes a positive return.

The logic of this story, as told by Lucien Bebchuk⁸ is impeccable. I take as an example to illustrate the soundness of his reasoning the hypothetical case he presents. Plaintiff has a claim with an expected value of 100 and anticipated litigation costs of 120. Defendant also has anticipated litigation costs of 120 and also values her expected liability at 100. Thus if obliged to do so, defendant would pay anything less than 220 to settle the case. But defendant need pay nothing because plaintiff's claim has negative expected value. Consequently her threat to litigate the case is not credible.

But, as Bebchuk persuasively points out, if the litigation proceeds in stages, plaintiff can incur a part of her total costs. After these costs are incurred, they are disregarded in plaintiff's decisions with respect to settlement. At this point the claim may have positive expected value. For example, suppose that plaintiff incurs one half of her total costs of 120 or 60 (reasonably enough, it is assumed that defendant will also incur costs of 60). The bargaining situation after these expenses are incurred is that plaintiff now has

8. See Lucien Arye Bebchuk, A New Theory Concerning the Credibility and Success of Threats to Sue, 25 J. LEGAL STUD. 1 (1996).

a positive-expected-value claim of 40, the 100 expected value of the claim less the remaining 60 of expense required to litigate the claim. Defendant's maximum offer is also reduced by the amount of her expenditure. The most defendant will pay is 160, the sum of the expected value of her liability and her anticipated litigation future costs. If defendant can recover more than 60 (the amount of her expenditures), the suit will be profitable. It would of course be worth it for defendant to pay more than 60 to avoid costs and liability totaling 160. However, as is the usual case in settlement bargaining, it would also be rational for plaintiff to accept any offer over 40, the expected value of her recovery less her future anticipated expenses.

For the strategy to be successful, then, plaintiff must get more than 60 in a bargaining range between 40 and 160. In the range between 40 and 60, plaintiff is better off accepting the offer. But if she does so, the suit will not be profitable.

The qualification I add to Bebchuk's analysis is that a sophisticated defendant may be able to prevent plaintiff from obtaining the amount in settlement required for the negative-expected-value suit to be profitable by exploiting the gap between the offer it would be profitable for plaintiff to accept and the amount she needs to make the suit profitable.

Yes, the game theorist will reply, but this is really no different from any bargaining situation where each party may decline a profitable offer in order to get an even better one that it is rational for the other party to make. My response is that the situations are not quite the same. It is more difficult for plaintiff to capture a sufficient share of the bargaining surplus to make her suit profitable than it is for a plaintiff or defendant in the usual case to decline profitable offers in order to get even better ones.

As noted above, the source of plaintiff's difficulty is the gap of 20 between the amount that would make her better off after she makes the expenditure and the amount she needs to recover to make the suit profitable. This gap is not the result of happenstance. At the outset of the litigation, the difference between defendant's anticipated expenditures and the expected value of her recovery is 20. Her anticipated costs are 120, her expected recovery is 100. The suit has a negative value of 20. Plaintiff can never escape this disparity. No matter what happens, the expected value of her recovery will always be 20 less than her total of litigating her case to a conclusion. To illustrate this point, suppose plaintiff incurs another 20 in costs. The net expected value of her claim is now 60—100 less 40. But she has incurred expenses of 80 to reach this point. The gap remains 20.

I believe that defendant can exploit this gap. Suppose defendant commits to a strategy of offering an amount slightly below the total expense plaintiff has incurred. If these expenditures are large, plaintiff will have to decline an offer greatly in excess of the expected value of her claim for the suit to be profitable.

But, the game theorists will inquire, is such a strategy by a defendant credible? I think it is. Every round of expenditures has three relevant effects: (1) the minimum amount plaintiff will be better off accepting in settlement is increased by the amount of the expenditure; (2) the maximum amount defendant will pay to settle the case is reduced by the amount of the expenditure; and (3) the amount that plaintiff must recover to make the suit profitable is increased by the amount of the expenditure.

With each round, then, the bargaining range in which plaintiff must obtain enough in settlement to make the case profitable narrows. Eventually defendant will not be willing to pay enough in settlement to make the case profitable, given the magnitude of the expenses plaintiff has incurred: Suppose, to take an extreme example, each party has incurred 119 of the 120 total expenses required to litigate the case. Defendant's maximum settlement offer would be 101, the sum of the expected value of her liability and her future costs. But plaintiff must recover 119 to make the case profitable.

It is, of course, not costless for defendant to pursue this strategy. Each time she declines to pay more in settlement than plaintiff's sunk costs, defendant must bear the costs of the next stage in litigation. It is, however, advantageous for defendant to incur costs by making litigation expenditures rather than paying an equivalent amount to plaintiff. Reducing plaintiff's payoff to less than her costs may, if anticipated, deter the plaintiff from suing in the first place. If you will, in the long run, because plaintiff's claim has negative expected value, she will not be able to earn a profit by suing.⁹

My conclusion, then, is that it is unlikely, perhaps impossible, for plaintiff to escape from the fact that her suit has negative expected value. At the least she must persist in resisting the temptation to accept very profitable offers. If the value of the suit is discounted by the possibility that plaintiff will not be able to do this, it may not be considered worth bringing. At the most, if I am right, plaintiff's sunk-costs strategy may be trumped by defendants' never paying enough to make the suit profitable for plaintiff's strategy.

V. CONCLUSION

Many legal scholars have tried to condemn (the assumed) prevalence of plaintiffs with "bad" suits nevertheless securing large settlements on "neutral" grounds that do not require disapproval of the outcomes being reached by judges and juries in those cases that are litigated to a conclusion. There are three theoretical strands that comprise these purportedly neutral grounds:

^{9.} Eric Talley suggests another strategy that might be employed by defendant to defeat a plaintiff's sunk-cost strategy. A defendant also can sink costs and thus reduce the maximum amount that she is prepared to pay in settlement. Sinking the costs may be profitable because if the costs are not sunk, avoiding them provides a reason for paying anything less than them to plaintiff in settlement. Sinking the costs is a form of commitment not to pay plaintiff to avoid incurring them. Confronted with such a commitment, plaintiff may not be able to anticipate suing profitably. Consequently, it may be worthwhile for defendant to sink the costs. I am incapable of doing a formal analysis of a game in which both parties pursue a strategy of sinking costs. I would welcome such a formal analysis by someone capable of doing it.

(1) the impact of risk aversion on defendants' settlement decisions; (2) the possibility that a case with a small chance of succeeding will in fact succeed by reason of the happenstance that it is assigned to a judge or jury strongly inclined to impose liability and award large damages; (3) the desire of a defendant to settle in order to avoid incurring litigation costs.

In my previous article and in the introductory portion of this article, I challenge this normative position. The body of the present article consists of positive analysis of the ability of plaintiffs with negative-expected-value claims to obtain a positive payment in settlement of their claims. My conclusion is that the ability of plaintiffs to do this has been greatly exaggerated.

I believe that if, indeed, plaintiffs are realizing "too much" in settlement, the most important reason that they are able to do so is because judges and juries are "too often" imposing liability and systematically granting "excessive" damages. The relevant objection to what is happening, if there is one, is substantive. For this objection to be systematically evaluated, it is necessary to give precise content to "too often" as applied to the imposition of liability and "excessive" as applied to the amount of damages awarded.

In short, I think that the game theorists are looking in the area illuminated very well by the light of their theory (under the lamppost, as it is often put) while the answers must be found in the much more poorly lit area where the normative and positive issues that define what "good" law is may be found.