

# Vanderbilt Law Review

---

Volume 51

Issue 6 *Issue 6 - Symposium: The Legal Implications of Psychology: Human Behavior, Behavioral Economics, and the Law*

Article 5

---

11-1998

## Behavioral Economics, the Economic Analysis of Bankruptcy Law and the Pricing of Credit

Robert K. Rasmussen

Follow this and additional works at: <https://scholarship.law.vanderbilt.edu/vlr>



Part of the [Bankruptcy Law Commons](#)

---

### Recommended Citation

Robert K. Rasmussen, Behavioral Economics, the Economic Analysis of Bankruptcy Law and the Pricing of Credit, 51 *Vanderbilt Law Review* 1679 (1998)

Available at: <https://scholarship.law.vanderbilt.edu/vlr/vol51/iss6/5>

This Symposium is brought to you for free and open access by Scholarship@Vanderbilt Law. It has been accepted for inclusion in Vanderbilt Law Review by an authorized editor of Scholarship@Vanderbilt Law. For more information, please contact [mark.j.williams@vanderbilt.edu](mailto:mark.j.williams@vanderbilt.edu).

# Behavioral Economics Analysis of Redistributive Legal Rules

Christine Jolls\*

I. INTRODUCTION .....	1653
II. DISTORTIONARY EFFECTS OF REDISTRIBUTIVE LEGAL RULES AND TAXES .....	1658
A. <i>The Processing of Uncertain Events</i> .....	1658
1. Estimation of Probabilities .....	1658
2. The Effect of Insurance .....	1663
3. Valuation of Uncertain Outcomes .....	1667
B. <i>Mental Accounting</i> .....	1669
C. <i>Work Incentives of Redistribution's</i> <i>Beneficiaries</i> .....	1673
III. PROBABILISTIC TAXES? .....	1674
IV. OTHER DIMENSIONS OF THE COMPARISON BETWEEN REDISTRIBUTIVE LEGAL RULES AND TAXES .....	1675
A. <i>Fairness Issues</i> .....	1675
B. <i>Other Considerations</i> .....	1676
V. CONCLUSION .....	1676

## I. INTRODUCTION

“Behavioral law and economics”—the general topic of this Symposium—seeks to bring together “behavior” and “law and economics.” Law and economics (without the modifier) is of course already about behavior. But it is typically about behavior of a particular sort: highly “rational” (in a particular sense of that term), optimizing behavior. Sometimes it is reasonable to assume that people behave in

---

\* Assistant Professor of Law, Harvard Law School. I thank David Charny, Einer Elhauge, Elizabeth Garrett, Lee Hopkins, Samuel Issacharoff, Howell Jackson, Lewis Kaplow, Duncan Kennedy, Russell Korobkin, Richard Pildes, Roberta Romano, Steven Shavell, Cass Sunstein, and participants at the NBER Summer Institute and the Vanderbilt Law School behavioral law and economics symposium for helpful comments. Steven Mitby (Harvard College Class of 1999), Todd Murtha (Harvard Law School Class of 1998), and Gil Seinfeld (Harvard Law School Class of 2000) provided excellent research assistance.

this manner; other times it is not.<sup>1</sup> The “behavioral” in “behavioral law and economics” is about infusing law and economics with insights into actual (rather than hypothesized) human behavior when such insights are needed to insure sound predictions or prescriptions about law.

Behavioral law and economics is not a critique of law and economics. It shares with that approach to the law the view that human behavior is organized by predictable patterns, which enable the analyst to generate models (often formal ones) and testable hypotheses about the effects of legal rules. And it shares the view that such analysis is an important and valuable pursuit, one most worthy of legal scholars’ attention. Where it disagrees with conventional law and economics is about the shape of the predictable patterns of human behavior. Its goal is to offer better predictions and prescriptions about law based on improved accounts of how people actually behave.

This Essay offers a behavioral economic analysis of redistributive legal rules. Redistributive legal rules are rules chosen for their effects in shifting wealth from high-income to low-income individuals (progressive redistribution). The desirability of such rules has been the subject of intense debate within the legal community. Many law and economics scholars have urged that legal rules be chosen solely with an eye towards Kaldor-Hicks efficiency (which I will call simply “efficiency” for the remainder of this Essay); these scholars often urge that distributional considerations be addressed (if they are to be addressed at all) exclusively through the tax and welfare systems.<sup>2</sup> On this view, distributive goals do not provide a basis for choosing an inefficient legal rule—although they might, it seems, provide a basis for choosing between two efficient rules.<sup>3</sup> Other legal scholars have argued that the selection of legal rules should be informed by distributional considerations even at the expense of efficiency.<sup>4</sup> I will call a rule “redistributive” if it makes such a trade-off between distributive objectives and efficiency.

---

1. See Christine Jolls, Cass R. Sunstein, & Richard Thaler, *A Behavioral Approach to Law and Economics*, 50 STAN. L. REV. 1471, 1485-87 (1998).

2. See, e.g., A. MITCHELL POLINSKY, AN INTRODUCTION TO LAW AND ECONOMICS 124-27 (2d ed. 1989); Louis Kaplow & Steven Shavell, *Why the Legal System Is Less Efficient than the Income Tax in Redistributing Income*, 23 J. LEGAL STUD. 667 (1994).

3. See Duncan Kennedy, *Law-and-Economics from the Perspective of Critical Legal Studies*, in 2 THE NEW PALGRAVE DICTIONARY OF ECONOMICS AND THE LAW 465, 469-70 (Peter Newman ed., 1998).

4. See, e.g., Guido Calabresi, *The Pointlessness of Pareto: Carrying Coase Further*, 100 YALE L.J. 1211, 1224 n.36 (1991); Kennedy, *supra* note 3, at 469-71.

A recurring theme in the debate over redistributive legal rules has been the relative cost of redistributing wealth through legal rules (defined to mean rules other than those that directly relate to the tax and welfare systems) and redistributing wealth through the tax and welfare systems (which I will call simply "the tax system" or "taxes" for the remainder of this Essay). Under the assumptions of neoclassical economics, any desired level of redistribution can be achieved at lower cost through the tax system than through legal rules.<sup>5</sup> This is not because the tax system can redistribute wealth costlessly; the animating feature of both lawyers' and economists' analyses of tax schemes is their potential to distort people's work incentives. Higher taxes on the wealthy will tend to discourage people from earning high incomes. But from the perspective of neoclassical economics, precisely the same is true of redistributive legal rules: "[U]sing legal rules to redistribute income distorts work incentives fully as much as the income tax system—because the distortion is caused by the redistribution itself . . ."<sup>6</sup> Thus, for example, a thirty percent marginal tax rate, together with an inefficient legal rule that redistributes an average of one percent of high earners' income to the poor, creates the same distortion in work incentives as a thirty-one percent marginal tax rate coupled with an efficient, non-redistributive legal rule.<sup>7</sup> However, the former regime also entails costs due to the inefficient legal rule. (For example, under a redistributive tort rule, potential defendants may be excessively cautious and thus may be discouraged from engaging in socially valuable activities.) Thus, whatever the desired level of redistribution, it can always be achieved at lower cost by choosing the efficient legal rule and increasing the degree of redistribution through the tax system than by choosing an inefficient rule because of its distributive properties.<sup>8</sup>

A basic premise about human behavior underlies this analysis: work incentives will be distorted by the same amount as a result of a probabilistic, law-based mode of redistribution (such as tort law) as they will be as a result of a tax. Thus, for example, if high-income individuals face a .02 probability of incurring tort liability for an accident, then a redistributive legal regime that imposes \$500,000

---

5. See Kaplow & Shavell, *supra* note 2; Steven Shavell, *A Note on Efficiency vs. Distributional Equity in Legal Rulemaking: Should Distributional Equity Matter Given Optimal Income Taxation?* 71 AM. ECON. REV. 414 (1981). The point is originally due to the Shavell article.

6. Kaplow & Shavell, *supra* note 2, at 667-68.

7. See *id.* at 668.

8. See *id.*

extra in damages (beyond what an efficient rule would call for) would distort work incentives by the same amount as a tax of \$10,000; \$10,000 is the expected cost of both the tax and the redistributive tort rule. (Of course, risk-averse actors may choose to purchase insurance against tort liability in such situations; the role of insurance in this analysis is discussed in Part II.A.2 below.)

Why should redistributive legal rules and taxes have the same effects on work incentives? “[W]hen an individual . . . contemplates earning additional income by working harder, his total marginal expected payments [out of that income] equal the sum of his marginal tax payment and the expected marginal cost on account of accidents.”<sup>9</sup> The expected costs of the two forms of redistribution are the same, and thus behavior is affected in the same way. At least that is the assumption that neoclassical economics makes.

Is this assumption valid? Would an individual typically experience the same disincentive to work as a result of a more generous (to victims) tort regime as would be experienced as a result of a higher level of taxation? Behavioral law and economics suggests that the answer may be no (although, as emphasized below, only empirical evidence that we do not yet have can definitively resolve the question). One reason for this conclusion stems from the fact that uncertain events—such as incurring tort liability—are often processed very differently from certain events. And taxes, to paraphrase Ben Franklin, are (along with death) nothing if not certain. (The possibility of uncertain or randomized taxation is discussed in Part III below.) A second reason for the difference between the two forms of redistribution is that they may be charged to different “mental accounts.” As described below, some costs may be viewed as direct charges against income, while others may be viewed as different sorts of “expenditures,” which may affect work incentives differently.

These points about redistributive legal rules do *not*, I will argue, suggest that people sometimes overestimate, but other times underestimate, the effects of such rules. If this were true, then on average the errors might cancel, or, at least, there would be no good way to predict the direction of the errors. Indeed, a suggestion along just these lines has been offered by Professors Louis Kaplow and Steven Shavell: if people “misestim[ate] the extent of redistribution [through legal rules], there is no compelling reason to assume that their guesses [will] be too low rather than too high.”<sup>10</sup> This Essay

---

9. *Id.* at 671.

10. *Id.* at 671 n.5.

advances the contrary view that the costs of redistributive legal rules are more likely to be *underestimated* than to be *overestimated*, and, thus, that work incentives may be distorted less by redistributive legal rules than by taxes.

One might then wonder whether markets will correct this "problem." Won't those who fail to understand the equivalence between the two types of redistribution be driven out? In a competitive market, this may occur; firms in such markets might lose money and be replaced if they failed to appreciate the equivalence.<sup>11</sup> But similar pressures do not exist for individuals (and for firms not in competitive markets); for these actors, the type of behavior identified here will not be weeded out by the market.<sup>12</sup> Because my analysis applies primarily to individuals rather than firms, I refer to the relevant decision makers as "individuals."

Part II below develops a behavioral economic analysis of redistributive legal rules and explains why, under this analysis, work incentives may be distorted less by these rules than by taxes.<sup>13</sup> (Again, a definitive resolution of this issue is not possible without empirical evidence that we currently do not have.) Part III discusses the possibility of randomized taxes, designed to mimic the uncertainty aspect of redistributive legal rules. My conclusion here is that political feasibility and other considerations suggest serious difficulties with using randomized taxes for this purpose. Part IV briefly discusses other dimensions (besides the effects on work incentives) of the comparison between redistributive legal rules and taxes.

Throughout the Essay I focus on the particular context of redistributive tort rules that operate between strangers (as opposed to between, say, firms and the consumers of their products—parties in a preexisting contractual relationship). This focus tracks that of much of the existing literature on redistributive legal rules.<sup>14</sup> The analysis of redistributive legal rules in settings such as contract law differs in

---

11. See Jolls et al., *supra* note 1, at 1486, for a general discussion of this phenomenon.

12. See *id.* at 1486-87 (discussing situations in which market pressures are absent or severely limited).

13. In a manuscript written independently of this Essay, Mark Kelman defends a similar conclusion about the effects on work incentives of redistributive legal rules and taxes. See Mark Kelman, *Strategy or Principle? The Choice Between Regulation and Taxation* 98-101 (unpublished manuscript, on file with author).

14. See, e.g., Kaplow & Shavell, *supra* note 2; Thomas J. Miceli & Kathleen Segerson, *Defining Efficient Care: The Role of Income Redistribution*, 24 J. LEGAL STUD. 189 (1995).

important respects from that offered here; these other settings are not discussed in this Essay.<sup>15</sup>

## II. DISTORTIONARY EFFECTS OF REDISTRIBUTIVE LEGAL RULES AND TAXES

For two major reasons, described below, behavioral law and economics suggests that work incentives may be distorted less by redistributive legal rules than by taxes. It is important to emphasize at the outset that the comparison of the two forms of redistribution offered in this Part is limited to their effects on work incentives; Part IV below briefly considers other dimensions of the comparison. The point I wish to emphasize for now is that the claim of neoclassical economics that redistributive legal rules and taxes cause the same degree of distortion in work incentives may need to be revisited once behavioral insights are taken into account.

### A. *The Processing of Uncertain Events*

#### 1. Estimation of Probabilities

A salient feature of redistributive legal rules in the tort context is the uncertainty of their application to any given actor. The effect of such rules "tends to be limited to those few who become parties to lawsuits."<sup>16</sup> While one knows that one will have to pay taxes every year, one knows that one is quite likely *not* to become involved in an accident. In such settings, it becomes important to consider how people estimate the probability of uncertain events.

In general, people may either underestimate or overestimate the probability of an uncertain event.<sup>17</sup> Underestimation is common (strokes and auto accidents, for example, are underestimated<sup>18</sup>), but overestimation may occur when a risk becomes highly visible or sali-

---

15. For a discussion of efficiency and distributional goals in the contract setting, see Richard Craswell, *Passing on the Costs of Legal Rules: Efficiency and Distribution in Buyer-Seller Relationships*, 43 STAN. L. REV. 361 (1991).

16. Kaplow & Shavell, *supra* note 2, at 675.

17. See Colin F. Camerer & Howard Kunreuther, *Decision Processes for Low Probability Events: Policy Implications*, 8 J. POL'Y ANALYSIS & MGMT. 565, 566 (1989) (describing divergence in both directions from actual probabilities or (where actual probabilities are difficult to compute) expert judgments of probabilities).

18. See W. KIP VISCUSI, *FATAL TRADEOFFS: PUBLIC AND PRIVATE RESPONSIBILITIES FOR RISK* 150 (1992); sources cited *infra* note 29.

ent to people.<sup>19</sup> This pattern of underestimation and overestimation seems to hold true across a range of different cultures and different times.<sup>20</sup> Although a full account of what risks are underestimated and overestimated by a given group of people at a given time may require consideration of social and cultural factors beyond the scope of individual psychology and, thus, behavioral economics as presently understood,<sup>21</sup> behavioral economics seems to provide significant insight into the basic pattern of underestimation and overestimation of risks.

An amazingly robust finding about human actors—and an important contributor to the phenomenon of risk underestimation—is that people are often unrealistically optimistic about the probability that bad things will happen to them. A vast number of studies support this conclusion.<sup>22</sup> Almost everyone thinks that his or her chances of having an auto accident, contracting a particular disease, or getting fired from a job are significantly lower than the average person's chances of suffering these misfortunes; estimates range from twenty to eighty percent below the average person's probability.<sup>23</sup> Likewise, on a more anecdotal level, if one surveys students anonymously at the beginning of a course, very few (if any) will predict that their final grade will be below the average grade in the course. Of course, these beliefs cannot all be correct; if everyone were below (or above) "average," then the average would be lower (or higher).<sup>24</sup>

---

19. See VISCUSI, *supra* note 18, at 150.

20. See Vincent T. Covello & Branden B. Johnson, *The Social and Cultural Construction of Risk: Issues, Methods, and Case Studies*, in *THE SOCIAL AND CULTURAL CONSTRUCTION OF RISK: ESSAYS ON RISK SELECTION AND PERCEPTION* vii, viii-ix (Branden B. Johnson & Vincent T. Covello eds., 1987).

21. See *id.* at viii-xii.

22. A bibliography (unpublished, on file with the author) containing nearly 200 articles on unrealistic optimism is available from Neil Weinstein, one of the early contributors to this literature.

23. See David M. DeJoy, *The Optimism Bias and Traffic Accident Risk Perception*, 21 *ACCIDENT ANALYSIS & PREVENTION* 333, 336-37 & tbl.3 (1989); John P. Kirscht, Don P. Haefner, S. Stephen Kegeles, & Irwin M. Rosenstock, *A National Study of Health Beliefs*, 7 *J. HEALTH & HUM. BEHAV.* 248, 250-51 (1966); Neil D. Weinstein, *Unrealistic Optimism About Future Life Events*, 39 *J. PERSONALITY & SOC. PSYCHOL.* 806, 809-12 (1980).

24. An interesting subtlety here is that if the question is whether one's probability of experiencing a bad event is below the average probability of experiencing that event (as distinguished from the average person's probability of experiencing that event), then it is possible for most people to be below average. To illustrate, suppose that for 80% of the population the probability of getting fired from a job is 10%, and for 20% it is 60%. Then the average probability of getting fired is 20% (.1 x .8 + .6 x .2 = .2). So for 80% of the population, the probability of getting fired (10%) is below the average probability (20%). But the average person has a 10% chance of getting fired, and it would be impossible for more than half of the population to have a probability below this. The natural interpretation of most studies of unrealistic optimism would seem to be that they request a comparison with the average person's probability, rather than

The phenomenon of unrealistic optimism is not, as one might initially speculate, an artifact of using college undergraduates as subjects in studies of the phenomenon. (One might think that undergraduates have a more positive outlook than most post-graduates, and perhaps a more positive outlook than those who do not have the opportunity to attend college.) Unrealistic optimism is also evident in studies of people taken from the general population.<sup>25</sup> It is also interesting to note that people display unrealistic optimism even when not asked to make direct comparisons between themselves and others; in one study, the first group of subjects was asked to estimate their own probability of contracting various diseases, and the second (randomly-selected) group was asked to estimate the probability that someone their age would contract those diseases; the latter group gave much higher probabilities than the former.<sup>26</sup> Unrealistic optimism is also apparent for both low-probability and high-probability events.<sup>27</sup> And unrealistic optimism appears to reflect not *overestimation* of the probability that negative events will happen to others, but rather *underestimation* of the probability that they will happen to oneself; for instance, people not only think (as noted above) that the probability of their being involved in an auto accident is lower than the average person's probability,<sup>28</sup> but also think that their probability is lower than the *actual* probability.<sup>29</sup> (They also appear to think that the probability of an auto accident in the general population—that is, for others rather than for themselves—is less than the actual probability;<sup>30</sup> this provides further support for the conclusion that people are underestimating their own probability as

---

with the average probability; the average probability would often be quite difficult to compute and not within the grasp of most subjects. Moreover, at least one study has dealt explicitly with the issue raised here, see Weinstein, *supra* note 23, at 809, and has found significant levels of unrealistic optimism even using the average *probability* benchmark, see *id.* at 809-12.

25. See Andrew Guppy, *Subjective Probability of Accident and Apprehension in Relation to Self-Other Bias, Age, and Reported Behavior*, 25 ACCIDENT ANALYSIS & PREVENTION 375, 377-78 & tbl.1 (1993); Neil D. Weinstein, *Unrealistic Optimism About Susceptibility to Health Problems: Conclusions from a Community-Wide Sample*, 10 J. BEHAV. MED. 481, 487-89 (1987).

26. See Kirscht et al., *supra* note 23, at 250.

27. See Weinstein, *supra* note 23, at 810 tbl.1 (finding unrealistic optimism for a wide range of unlikely and much-more-likely events).

28. See DeJoy, *supra* note 23, at 336-37 & tbl.3; Ola Svenson, Baruch Fischhoff, & Donald MacGregor, *Perceived Driving Safety and Seatbelt Usage*, 17 ACCIDENT ANALYSIS & PREVENTION 119, 121, 122 tbl.1 (1985).

29. See Richard J. Arnould & Henry Grabowski, *Auto Safety Regulation: An Analysis of Market Failure*, 12 BELL J. ECON. 27, 34-35 (1981); Camerer & Kunreuther, *supra* note 17, at 566.

30. See Sarah Lichtenstein, Paul Slovic, Baruch Fischhoff, Mark Layman, & Barbara Combs, *Judged Frequency of Lethal Events*, 4 J. EXPERIMENTAL PSYCHOL. 551, 564 tbl.5, 566 fig.11 (1978).

opposed to overestimating the average person's probability.) Finally, there is evidence that people's real-world behavior in certain areas tracks the predictions of unrealistic optimism; for instance, many people fail to buy insurance against negative events such as floods and earthquakes despite massive federal subsidies and heavy marketing efforts by insurers<sup>31</sup> (and federal aid in the event of a flood or earthquake is not a convincing explanation for this phenomenon, since most of those who fail to buy insurance expect no federal aid<sup>32</sup>). Of course, people in other contexts do buy insurance (for instance, against auto accidents); the relationship between this fact and the unrealistic optimism findings is discussed in Part II.A.2 below.

What explains unrealistic optimism? The explanation seems to be that by thinking things will turn out well, people often increase the chance that they will turn out well. Unrealistic optimism, from this perspective, is generally a highly adaptive behavior (although it may harm people in particular instances). Consistent with the adaptiveness hypothesis, unrealistic optimism tends to correlate with happiness, contentment, and the ability to engage in productive, creative work.<sup>33</sup> Also, there is evidence (although this is subject to debate) that those with accurate, as opposed to excessively favorable, impressions of their personal abilities (impressions that may in turn be correlated with their impressions of the probability that a negative event will occur) tend to be clinically depressed.<sup>34</sup> The adaptiveness explanation for unrealistic optimism provides further support for the conclusion that this phenomenon reflects not overestimation of the average person's probability of a negative event, but underestimation of one's own probability.

People offer unrealistically optimistic assessments of the probability of negative events in areas directly related to the effects of redistributive legal rules. For example, most people think that they are less likely than the average person to be sued.<sup>35</sup> Likewise, people think that they are less likely than the average person to cause an

---

31. See Howard Kunreuther, *Limited Knowledge and Insurance Protection*, 24 PUB. POL'Y 227, 231-39 (1976).

32. See *id.* at 236.

33. See Shelley E. Taylor & Jonathan D. Brown, *Illusion and Well-Being: A Social Psychological Perspective on Mental Health*, 103 PSYCHOL. BULL. 193 (1988).

34. See Peter M. Lewinsohn, Walter Mischel, William Chaplin, & Russell Barton, *Social Competence and Depression: The Role of Illusory Self-Perceptions*, 89 J. ABNORMAL BEHAV. 203, 207-08, 210-11 (1980). For a critical discussion of these findings, see James C. Coyne & Ian H. Gotlib, *The Role of Cognition in Depression: A Critical Appraisal*, 94 PSYCHOL. BULL. 472, 479 (1983).

35. See Weinstein, *supra* note 23, at 810 tbl.1.

auto accident.<sup>36</sup> They also think that their own probability of being caught and penalized for drunk driving is lower than the average driver's probability of being apprehended for such behavior.<sup>37</sup>

What does unrealistic optimism about the probability of negative events imply for the distortionary effects of redistributive legal rules as opposed to taxes? People will tend to underestimate the probability that they will be hit with liability under a redistributive legal rule; therefore, their *perceived* cost of the rule will be lower. As a result, their work incentives will tend to suffer a lesser degree of distortion than under a tax yielding the same amount of revenue for the government. For instance, in the numerical example from the introduction, people may not attach an expected cost of \$10,000 to a .02 (objective) probability of having to pay \$500,000 extra in damages under a redistributive tort rule; they may tend to underestimate the probability that they will incur liability—and thus they may tend to underestimate the expected cost of the rule—as a result of unrealistic optimism.<sup>38</sup>

In some cases, however, people may tend to *overestimate* the probability of a negative event. Overestimation may often occur when an event is highly salient, threatening, or otherwise highly "available"; familiar examples include nuclear power plant accidents and environmental issues such as contamination from toxic waste dumps.<sup>39</sup> An event is "available" if it comes readily to people's minds; events that are highly available are typically ones that have received a great deal of media attention, and are often ones that are intrinsically vivid or memorable, or have a technological nature.<sup>40</sup>

---

36. See DeJoy, *supra* note 23, at 336 tbl.1 (people think they are less likely than the average person to (1) cause a serious accident while intoxicated; (2) lose control of their vehicles and hit another vehicle; and (3) bump another vehicle while pulling from a parking space); Svenson et al., *supra* note 28, at 121 (people think they are safer behind the wheel than the average driver); Ola Svenson, *Are We All Less Risky and More Skillful Than Our Fellow Drivers?*, 47 ACTA PSYCHOLOGICA 143, 144-46 (1981) (same).

37. See Guppy, *supra* note 25, at 378, 379-80.

38. Note that underestimation of the probability of liability would affect not only the distortion of work incentives from a redistributive (and thus, by the definition given above, inefficient) legal rule, but also the determination of what the efficient legal rule would be. If potential tortfeasors underestimate the probability of liability, the efficient (meaning optimal-deterrence-achieving) legal rule would be more generous to tort victims than the efficient legal rule without underestimation of probabilities would be. But the newly-generous rule would not be "redistributive" in the relevant sense, since it would not be sacrificing efficiency to achieve distributive goals. The focus of this Essay, as stated in the introduction, is on legal rules that redistribute wealth at the expense of efficiency.

39. See VISCUSI, *supra* note 18, at 150; Jolls et al., *supra* note 1, at 1518-22; Timur Kuran & Cass R. Sunstein, *Availability Cascades and Risk Regulation*, at 1-14 (Apr. 26, 1998) (unpublished manuscript, on file with author).

40. See Jolls et al., *supra* note 1, at 1518-19.

People may significantly exaggerate the probability of such events. But this phenomenon is unlikely to affect the assessment of redistributive legal rules, at least insofar as individuals (the focus of this Essay) rather than firms are concerned. Consider the quintessential event that can expose an individual to tort liability: the auto accident. As noted above, people appear to underestimate the probability that they will be involved in an auto accident (relative to the actual probability);<sup>41</sup> this presumably results from a combination of underestimation of the general probability of an accident (by approximately fifty percent according to the leading study)<sup>42</sup> and further underestimation of people's *own* probability relative to the average person's.<sup>43</sup> The situation would likely be different, of course, for an event such as a nuclear power plant accident, the probability of which might be overestimated due to its availability. But highly available events (consider also the example of contamination from a toxic waste dump) tend to involve firm, not individual, liability. It is difficult to come up with examples of events giving rise to individual liability the probability of which is likely to be overestimated rather than (as suggested above) underestimated. And with underestimation of the probability of liability, work incentives will be distorted less by redistributive legal rules than by taxes.

## 2. The Effect of Insurance

How is the analysis offered above affected by the availability of insurance? Because insurance almost always involves some combination of deductibles, copayments, and experience rating (to mitigate problems of moral hazard), even with insurance there will still be *some* uncertainty about the degree to which a redistributive legal rule will affect a given individual, just as there is uncertainty under a redistributive legal rule without insurance. Part of the redistributive cost will thus be incurred only probabilistically, depending on whether an accident occurs. And, based on the analysis offered above, individuals will tend to underestimate the probability of being affected, and thus their work incentives may again be less distorted than with a tax (although the effect will be less pronounced).

---

41. See sources cited *supra* note 29.

42. See Lichtenstein et al., *supra* note 30, at 564 tbl.5.

43. See DeJoy, *supra* note 23, at 336-37 & tbl.3; Svenson et al., *supra* note 28, at 121, 122 tbl.1.

A numerical example illustrates the point. Consider the choice between a tax of \$10,000 and an increase of \$500,000 in tort liability under a redistributive legal rule that affects high-income individuals with probability .02 (and has no effect on parties not in the high-income category). Each of these alternatives has an expected cost of \$10,000. Imagine that the tax is annual and that .02 is the probability that the average high-income individual is affected by the legal rule in each year. Further suppose (to make the numbers work out nicely) that the rule, if enacted, will be in effect for ten years and that there is no discounting of future insurance payments. Now suppose that under the redistributive legal rule, high-income individuals will purchase experience-rated insurance against the \$500,000 liability; imagine that this insurance costs \$10,000 in the first year after enactment as long as the person does not have an accident during that year, and that, if the person has an accident, the cost of insurance increases by \$20,000 for that year and the next nine years. Likewise, if the person, anytime during those nine years, has an accident (either a first accident or a subsequent accident), the cost of insurance increases by \$20,000 per year (above the level it occupied before the latest accident) for the remaining years. Suppose that the basic annual premium falls to \$7,750 in the second and subsequent years, so that someone who did not have an accident would pay \$7,750; someone who had a single accident would pay \$27,750; and so on. The insurance company's expected intake from a given insured over the ten years in which the redistributive legal rule is in effect is \$79,750 from the basic premium (\$10,000 for the first year and \$7,750 per year for years two through ten) and \$22,000 from the additional premium (probability .02 of an accident each year; \$200,000 each for any accident in the first year, \$180,000 each for any accident in the second year, and so on). The total expected intake is thus \$101,750—\$1,750 more than the \$100,000 the company will have to pay out on an expected basis for accidents caused by the insured.<sup>44</sup>

What is the situation of a typical high-income individual in the redistributive tort regime? Consider, for example, an individual who, as of year five, has not had an accident. This individual's premium in year five will be \$7,750 if no accident occurs in that year; if an accident occurs, then the individual will pay an additional \$120,000 in

---

44. The amount that it will have to pay out on an expected basis is the probability of one accident over the ten years (.167) multiplied by \$500,000, plus the probability of two accidents over the ten years (.015) multiplied by \$1,000,000, plus the probability of three accidents over the ten years times the cost of three accidents, and so on up to ten accidents (the maximum number that can occur).

premiums over that year and the five succeeding years. What will be the work disincentive created by this regime? The expected cost of having a high income in year five is now \$10,150 (\$7,750 plus .02 times \$120,000). This is slightly greater than the \$10,000 annual tax that would be levied as an alternative to the redistributive legal rule. But the analysis from above suggests that people will tend to underestimate the probability of causing an accident and thus incurring the additional cost; as a result, they will tend to distort their work incentives less in response to the redistributive legal rule than in response to the \$10,000 tax.

The opposite conclusion could hold, however, if the carrying costs of insurance were large enough to outweigh the effect of underestimation of the probability of causing an accident. The larger the carrying costs, the larger the expected cost of the redistributive legal rule (say, \$11,000 or \$12,000 in the above example, instead of \$10,150), and at some point this effect would begin to outweigh the effect of underestimation of the probability of causing an accident. To take a (possibly extreme) example, if carrying costs were so large that a high-income individual paid \$10,000 each year (rather than just in the first year) as a base premium, *plus* surcharges for past accidents, under a redistributive legal rule, compared to \$10,000 annually as a tax, then obviously underestimation of the probability of causing an accident would not lead to a lower perceived cost of the redistributive legal rule, since the fixed annual payment alone would equal the tax.

But this argument assumes that people obtain insurance coverage to the full extent of their liability (net of deductibles, copayments, and experience rating). That is, if a redistributive legal rule exposes high-income individuals to a risk of \$500,000 extra in liability, then they purchase coverage corresponding to the full \$500,000. Is this assumption accurate? Some casual empiricism raises questions (but does not, unfortunately, provide a definitive answer). One-third of all vehicular negligence plaintiffs, for example, seek or are awarded a recovery beyond the insurance limits of the defendant, suggesting the absence of full insurance on the part of many defendants.<sup>45</sup> (Of course, it is likely that plaintiffs frequently do not even try to recover beyond defendants' policy limits, even if such

---

45. See Samuel R. Gross & Kent D. Syverud, *Don't Try: Civil Jury Verdicts in a System Geared to Settlement*, 44 UCLA L. REV. 1, 22 tbl.12 (1996). In the authors' data, the absence of full insurance could reflect the need to pay a deductible rather than the failure to purchase a policy with a high enough limit, *see id.* at 21, but the authors suggest that the latter reason is the more important, *see id.* at 23 (stating that many motorists choose low policy limits).

recovery might be legally warranted and economically feasible in light of the defendant's assets.) Many (perhaps most) motorists appear to carry insufficient coverage to provide complete protection against major personal injury claims.<sup>46</sup> Of course, of greater interest than the overall degree of underinsurance by defendants would be the degree of underinsurance among those most likely to be affected by (because least likely to be judgment-proof as against) increases in tort liability occasioned by redistributive legal rules. Unfortunately, I am not aware of any data broken down by income in this manner.

Without such data, it is not possible to reach a definitive conclusion about how insurance might alter the foregoing analysis of the effects on work incentives of redistributive legal rules and taxes. (Other data, such as the degree of experience rating in insurance, would also be helpful.) However, even if insurance completely undoes the effects of uncertainty on which the argument above depends, the phenomenon of mental accounting, discussed in Part II.B below, provides a separate reason that work incentives may be distorted less by redistributive legal rules than by taxes.

A final comment about insurance is necessary here. One might wonder whether the fact that many people purchase insurance undermines the conclusion that people often underestimate the probability of negative events. For if they think such events are unlikely to happen, why would they buy insurance against them? There are several responses. First, as noted earlier, people sometimes do not buy insurance in circumstances in which it would seem that a rational decision maker would be likely to do so.<sup>47</sup> Second, with regard to situations in which people do buy insurance, it may be that a high level of risk aversion toward large losses causes them to want to insure against such losses despite their underestimation of the probability that such losses will occur. Even if people underestimate the probability of a loss, risk aversion may cause insurance to remain attractive. Note that this does not necessarily imply that people are risk averse toward the probabilistic losses that remain *after* the purchase of insurance (due to deductibles, copayments, experience rating, and the failure to obtain coverage to the full extent of tort liability); as will be discussed just below, there is some evidence that people are risk *seeking* toward moderate losses. So the fact that people choose to insure against some portion of the losses to which they are exposed does not imply that their perceived cost of the losses

---

46. *See id.* at 23.

47. *See supra* notes 31-32 and accompanying text.

to which they *remain* exposed after the purchase of insurance is greater than the objective expected value of these losses. (For instance, if the probability of incurring liability is .02 and the extra liability under a redistributive legal rule is \$500,000, the fact that a person finds it in his or her interest to pay \$8,000 for coverage against \$400,000 of the \$500,000 in liability (coverage with an objective expected value of \$8,000) does not imply that the perceived cost of the remaining probabilistic loss (a .02 (objective) probability of incurring \$100,000 in liability) is greater than or equal to a sure payment of \$2,000 (the objective expected value of this loss).) Of course, it also does not imply the opposite; we simply do not know why people on the one hand appear to be unrealistically optimistic and also often risk seeking (as discussed below), but on the other hand often purchase insurance. For those who have found my attempt to reconcile these features of human behavior unpersuasive, I note again that Part II.B below, on mental accounting, provides a separate reason (unrelated to the processing of uncertain events) that work incentives may be distorted less by redistributive legal rules than by taxes.

### 3. Valuation of Uncertain Outcomes

Until now the discussion of the effects of uncertainty has focused on the role of errors in probability estimation. A separate set of issues concerns the way in which people process whatever estimates they come up with. For instance, how is an estimated probability of .01 viewed by decision makers? Two issues warrant brief mention.

The first is that people often exaggerate the difference between a small (but positive) probability of a particular event and a zero probability of that event.<sup>48</sup> This is often called the "certainty effect."<sup>49</sup> It might imply that people overweight small probabilities,<sup>50</sup> or, alternatively, it may be that people weigh small probabilities accurately and a zero probability inaccurately. (The empirical evidence just tells us that they overstate the difference between the two.) Thus, it is not really clear in what direction the certainty effect cuts for purposes of the analysis above. If people overweight small probabilities, then there is a countervailing effect to the phenomenon of unrealistic opti-

---

48. See Daniel Kahneman & Amos Tversky, *Prospect Theory: An Analysis of Decision Under Risk*, 47 *ECONOMETRICA* 263, 265-67 (1979).

49. See *id.* at 265.

50. See *id.* at 281. Kahneman and Tversky assume that a zero probability is weighted accurately; in formal terms, they posit  $\pi(0) = 0$  where  $\pi$  is the decision-weighting function—that is, a zero-probability event is given weight zero. See *id.* at 280.

mism emphasized above; if they weigh a zero probability inaccurately, then the analysis is unaffected.

The second issue that warrants brief mention in connection with how probability estimates are processed is the way in which people view probabilistic losses (for instance, a .02 probability of incurring \$500,000 in tort liability). To the extent that people are insured, of course, losses are no longer probabilistic, so the key question is people's attitudes toward the probabilistic losses that remain even after the purchase of insurance—losses that will reflect the failure to obtain coverage to the full extent of tort liability, and the deductibles, copayments, and experience rating associated with whatever insurance is obtained. As to these probabilistic losses, people may exhibit three different types of attitudes: they may be risk seeking (the probabilistic loss is preferred to a certain loss with the same expected value); risk neutral (the two types of losses are viewed as equivalent); or risk averse (the probabilistic loss is viewed as worse than the certain loss). These risk attitudes will affect the degree to which work incentives are distorted by redistributive legal rules and taxes. If people are risk seeking, then probabilistic losses (associated with redistributive legal rules) will be perceived as less costly—and thus will distort work incentives less—than certain losses (associated with taxes); if people are risk averse, then the opposite will be true. Unfortunately, it is difficult to be sure about whether people will be risk seeking or risk averse (or risk neutral) toward the probabilistic losses at issue here. Economists often assume that people are risk averse across the board (and they invoke the fact that people purchase some degree of insurance in support of this conclusion).<sup>51</sup> However, there is a substantial body of empirical (laboratory) evidence suggesting that people are risk seeking rather than risk averse toward probabilistic losses of moderate size (for instance, thousands or tens of thousands of dollars, as opposed to hundreds of thousands).<sup>52</sup> For example, in a study of MBA students, the average subject preferred a five percent chance of losing \$5,000 (in 1965 dollars) to having to pay \$100 for sure, despite the fact that the

---

51. See, e.g., POLINSKY, *supra* note 2, at 57-58.

52. See Kahneman & Tversky, *supra* note 48, at 268 (finding preference for probabilistic losses over certain losses with higher (meaning less negative) expected values); C. Arthur Williams, *Attitudes Toward Speculative Risks as an Indicator of Attitudes Toward Pure Risks*, 33 J. RISK & INS. 577, 580-82 & tbl.1 (1966) (finding same preference as in Kahneman and Tversky's study); see also Peter C. Fishburn & Gary A. Kochenberger, *Two-Piece Von Neumann-Morgenstern Utility Functions*, 10 DECISION SCI. 503, 509-10 (1979) (finding convexity of utility functions in losses for 20 of 28 cases, but not indicating magnitude of losses).

expected cost of the risky option was \$250.<sup>53</sup> The lack of a clear conclusion about whether people are risk seeking or risk averse toward the sorts of probabilistic losses that remain after the purchase of insurance makes it difficult to say how risk attitudes affect the analysis of the effects of redistributive legal rules and taxes. While risk attitudes (like the certainty effect) could point in either direction, the analysis of unrealistic optimism offered above provides a systematic reason (subject to the points about insurance raised above) to think that work incentives may be distorted less by redistributive legal rules than by taxes.

### B. Mental Accounting

The second major reason that work incentives may be distorted less by redistributive legal rules than by taxes is that the costs imposed by the two approaches to redistribution may be attributed to different "mental accounts." The idea behind "mental accounting" is that people do not always view a dollar spent in the same way; it may matter very much from which "account" the dollar is coming. Money is not fungible in the way that standard economics assumes.

Consider this example:

*Case 1:* Imagine that you have decided to see a play where admission is \$10 per ticket. As you enter the theater you discover that you have lost a \$10 bill. Would you still pay \$10 for a ticket to the play?

*Case 2:* Imagine that you have decided to see a play and paid the admission price of \$10 per ticket. As you enter the theater you discover that you have lost the ticket. The seat was not reserved, and the ticket cannot be recovered. Would you pay \$10 for another ticket?

Standard economic theory predicts no difference between these two situations. Either it is worth paying \$10 to see the performance, notwithstanding the loss of \$10 (or something worth \$10) discovered on the way into the theater, or it is not. What actually happens? Eighty-eight percent of respondents in Case 1 would still pay \$10 for a ticket, but only forty-six percent of respondents in Case 2 would buy a new ticket.<sup>54</sup> These results may be explained by mental accounting.

---

53. See Williams, *supra* note 52, at 580-82 & tbl.1. Only if the chance of losing \$5,000 rose to ten percent (for an expected loss of \$500) would the average subject have been indifferent between the risky option and a sure loss of \$100. See *id.* at 582 tbl.1.

54. See Amos Tversky & Daniel Kahneman, *The Framing of Decisions and the Psychology of Choice*, 211 SCIENCE 453, 457 (1981).

In the first situation, the \$10 ticket cost is "charged" to the "entertainment" account; the loss of a \$10 bill is charged to a different account. But in the second situation, the \$10 lost ticket is charged to the entertainment account, and thus if a new ticket is purchased, \$20 in entertainment costs will have been incurred—perhaps more than the individual wishes to spend.

Mental accounting may also occur in the context of redistributive legal rules and taxes. When taxes are used to redistribute wealth, taxes go up solely on account of earning more income; as one earns more, one pays more. In this circumstance, it is reasonable to imagine that people view the cost of taxes as a direct charge against their incomes. Consider the receipt of an academic honorarium. My guess is that most people view a \$500 honorarium as something like \$300 in income; the tax liability is simply subtracted off the top.

In contrast, the costs of redistributive legal rules may be viewed as expenditures out of income (rather than direct charges against income); and heightened expenditures out of income may produce fewer work disincentives than direct charges against income. Why would the costs of redistributive legal rules be viewed as heightened expenditures rather than direct charges against income? What occasions the cost of a redistributive legal rule is not *just* that a person has earned a high income, but also that the person has caused an accident. The expenditure is not one with a sole cause—earning more income—but rather is one with dual causes—earning more income and being a tortfeasor (the latter of which may well loom larger in the actor's mind). Indeed, the first cause (earning a higher income) is not even a direct cause of the expenditure; the chain of causation is that earning more income led the person to engage, or be more likely to engage, in an activity (say, driving an automobile) than the person otherwise would have been, and this in turn produced greater exposure to tort liability. (Earning more income would be a direct cause of the expenditure associated with a redistributive legal rule if the rule explicitly conditioned damages on income—say, \$250,000 in liability for defendants below a certain income level and \$750,000 for those above that level; but such rules have commanded little support among commentators.<sup>55</sup>)

Interestingly, the fact that redistributive legal rules do their work based not only (and not even directly) on income level but also

---

55. See Kaplow & Shavell, *supra* note 2, at 675. As this discussion suggests, neither Kaplow and Shavell's analysis nor the analysis in this Essay assumes a situation in which damages are explicitly conditioned on income.

on accident-related behavior has been a significant source of criticism in the law and economics literature. If redistribution is the goal, it is said, then it is best achieved by directly targeting those with high incomes. For "[i]t may be that higher income persons are more likely to be drivers than pedestrians, but certainly there are many low-income drivers and high-income pedestrians. Thus, liability rules regarding driver-pedestrian accidents are not very precise instruments for accomplishing income redistribution."<sup>56</sup> What this account may overlook, I suggest, is that directly targeting high-income individuals may increase the level of distortion in work incentives caused by the redistribution. Again, this could not be true from the perspective of conventional economics, but a mental accounting phenomenon may suggest that it is. The possible cost of redistributive legal rules in targeting less precisely the parties from whom redistribution is sought must be balanced against the possible benefit of such rules along the dimension of minimizing the distortion of work incentives.

Of course, the degree to which a redistributive legal rule or tax is viewed as a direct charge against income, and hence a direct disincentive to work, may be influenced by the way in which it is presented. If W-2 forms listed expected tort obligations under a redistributive legal rule, then the costs of the rule might be more likely to be charged directly against income. This would make redistributive legal rules more like taxes. What about the reverse—making taxes seem less like charges against income; would this be possible? One might imagine strategies such as not reporting amounts withheld on pay stubs, having the government rather than individuals prepare tax returns, or making taxes more "hidden" in some other way (for example, by structuring them as sales taxes rather than income taxes).<sup>57</sup> But it seems unlikely, for the reason given just below, that strategies such as these would produce a situation in which taxes would be perceived no differently from redistributive legal rules (although taxes might be perceived differently from the way they are perceived under the present system) by those whose work incentives we are seeking not to distort.

In considering the comparison between redistributive legal rules and taxes from a mental accounting perspective (including the issue just raised), it is useful to think about how the *beneficiaries* of each of these forms of redistribution are regarded. Often the

---

56. POLINSKY, *supra* note 2, at 126.

57. See Edward J. McCaffery, *Cognitive Theory and Tax*, 41 UCLA L. REV. 1861, 1874-86 (1994), for a discussion of some of the possibilities.

beneficiaries of legal rules (even, I think, redistributive ones) are regarded as having *rights* to what they receive; for instance, the tort victim has a *right* to the damages paid by the tortfeasor. In contrast, beneficiaries of redistributive taxes often are not regarded in this way; instead, they are living off government largesse (it is thought). Just as the beneficiaries of redistributive legal rules and taxes are viewed differently, I want to suggest, those on the paying end will often respond differently to the two regimes in terms of the degree of distortion of work incentives, even if the tax regime is implemented in a manner designed to diminish the sense that taxes are direct charges against income.

Much more would be necessary, of course, before reaching any sort of final conclusion about the effects of redistributive legal rules and taxes from a mental accounting perspective. The empirical evidence discussed above (and the other empirical evidence of which I am aware on the topic of mental accounting) involves contexts that are quite different from the one addressed in this Essay, and it may be that mental accounting is a highly context-specific phenomenon. As an illustration, the likelihood that work incentives would be distorted less by redistributive legal rules than by taxes as a consequence of mental accounting might depend critically on the prevalence of redistributive rules in the legal system. At the current status quo, the costs of redistributive legal rules might be accounted for differently from the costs of taxes, but under a system in which massive redistribution occurred through legal rules, it is conceivable that people would begin to view the costs of redistributive legal rules as direct charges against income.<sup>58</sup> One might also argue that, even in today's system, the costs of redistributive legal rules are viewed as "losses," whereas the costs of taxes are viewed as "foregone gains"; in this case behavioral economics would suggest that the costs of redistributive legal rules could weigh more heavily on people's minds (due to their characterization as losses).<sup>59</sup> Here redistributive legal rules would lead to greater distortion of work incentives than taxes would. But it is unclear why the costs of taxes would be viewed as foregone gains rather than losses; my own hunch is that people typically experience them as clear losses. In any event, future

---

58. Cf. *id.* at 1876-77 ("hidden" taxes may become visible as they become more widespread).

59. See Kahneman & Tversky, *supra* note 48, at 279 (citing Eugene Galanter & Patricia Pliner, *Cross-Modality Matching of Money Against Other Continua*, in *SENSATION AND MEASUREMENT* 65 (Howard R. Moskowitz, Bertram Scharf, & Joseph C. Stevens eds., 1974)) (losses are weighted more heavily than gains).

empirical work may help to disentangle the different strands of analysis; my only purpose in this section has been to suggest the intuitive plausibility of the idea that under our current legal and tax systems, work incentives may be distorted less by redistributive legal rules than by taxes as a consequence of mental accounting.

### C. *Work Incentives of Redistribution's Beneficiaries*

Until now, this Part has focused on the work incentives of those who may be burdened by redistribution; it has asked whether work incentives are likely to be distorted as much by redistributive legal rules as by taxes. Redistribution, however, may affect not only the incentives of those burdened by it, but also the incentives of those benefitted by it. Neoclassical economies would suggest that the effects on beneficiaries—like the effects on those burdened—will be the same under redistributive legal rules and taxes; for example, if low-income individuals face a .02 probability of becoming tort victims, then a redistributive legal rule that imposes \$500,000 extra in tort damages (above what an efficient rule would call for) will distort the work incentives of low-income individuals by the same amount as a welfare or transfer payment of \$10,000 would (assuming for simplicity that beneficiaries are risk neutral).

How do redistributive legal rules and taxes compare in terms of their effects on beneficiaries' work incentives from the perspective of behavioral law and economics? The discussion just above (of mental accounting) hinted at one difference between the two forms of redistribution: what occasions receiving the benefit of a redistributive legal rule is not *just* that a person has a low income, but also that the person was the victim of an accident, and the latter cause may well loom larger in the beneficiary's mind. Thus, beneficiaries' work incentives may be distorted less by redistributive legal rules than by taxes, just as the distortion may be less for those *burdened* by redistribution when redistributive legal rules as opposed to taxes are used (as discussed above).

Uncertainty provides another reason that work incentives of beneficiaries may be distorted less by redistributive legal rules than by taxes. As discussed in Part II.A above, in settings of uncertainty, unrealistic optimism may lead people to underestimate the probability of negative events. Assuming that being a tort victim is viewed as a negative event even under a redistributive legal rule (under which recovery is likely to be greater than it would be under an efficient rule), underestimation of the probability of negative

events would imply less distortion of beneficiaries' work incentives from redistributive legal rules than from taxes. Certainly in the case of nonmonetary harm (for example, losing a limb), it seems reasonable to assume that being a tort victim is viewed as a negative event even under a redistributive legal rule. In the case of purely monetary harm, whether it would be viewed as a negative event would depend on the magnitude of the redistribution as compared with the costs of litigation and the limitations (if any) on recovery of damages; these together would determine whether a victim would be better or worse off as a result of the tort, and, hence, whether the occurrence of the tort would be viewed as a negative event. At least for nonmonetary harm, however, underestimation of the probability of harm is likely to reinforce the effects of mental accounting in making redistributive legal rules more attractive than taxes from the perspective of minimizing the distortion of beneficiaries' work incentives.

### III. PROBABILISTIC TAXES?

Part II described two major reasons that work incentives may be distorted less by redistributive legal rules than by taxes. The first of these turned on the fact that redistributive legal rules will tend to affect individuals only probabilistically (even with insurance, although less so, and subject to the caveats noted in Part II.A.2), whereas taxes generally do not operate in this manner. An obvious question raised by this account is whether a tax "lottery"—operating probabilistically in the same way as a redistributive legal rule—might achieve some of the benefits of the redistributive legal rule. Thus, for example, rather than paying \$10,000 in taxes for sure, one would face a .02 probability of having to pay \$500,000.

One objection to a tax lottery of this sort concerns its political feasibility. Would the public ever tolerate it? The notion that one's taxes would probably be zero, but might be extremely high, depending on luck of the draw, might strike many as unacceptable. Indeed, even economists who sympathize with various benefits of randomized tax schemes (benefits other than those emphasized here) dismiss them as unrealistic from a practical perspective.<sup>60</sup> One might wonder why the random element of the tort system does not seem to be viewed in the same way; presumably the reason is that one is viewed as incurring

---

60. See, e.g., Joseph E. Stiglitz, *Pareto Efficient and Optimal Taxation and the New Welfare Economics*, in 2 HANDBOOK OF PUBLIC ECONOMICS 991, 1012-14 (Alan Auerbach & Martin Feldstein eds., 1987).

the cost of a redistributive legal rule because one caused an accident, not because one's number was drawn randomly from a hat. (It is not my purpose to suggest that this distinction makes sense, just that it may exist.)

But apart from the political feasibility of randomized taxation, there is another reason to think that it might not produce the desired effect. A major factor in underestimation of the probability of negative events based on unrealistic optimism seems to be the perceived controllability of such events.<sup>61</sup> Incurring tort liability, for example, is a partial function of the individual's own acts. But a bad draw in the tax lottery would be completely out of the individual's control. As a result, underestimation of the probability of its occurrence might well be far less (if it even occurred at all) than underestimation of the probability of incurring tort liability. Thus, even under a lottery-type system, taxes would tend to produce greater distortion of work incentives (due to less pronounced underestimation) than redistributive legal rules would.

In sum: a tax lottery would almost certainly be politically infeasible, and it is far from clear that it would mimic the effects on work incentives of a redistributive legal rule in any event.

#### IV. OTHER DIMENSIONS OF THE COMPARISON BETWEEN REDISTRIBUTIVE LEGAL RULES AND TAXES

##### *A. Fairness Issues*

This Essay has focused until now on whether work incentives are likely to be distorted as much by redistributive legal rules as by taxes. This is fundamentally a point about efficiency in achieving redistribution; the question is which alternative means of redistribution will tend to be less costly in terms of incentives to work. A separate question is whether redistribution through legal rules that involve uncertainty in application (such as redistributive tort rules) is "unfair," due to the fact that a relatively small number of people bear the primary burden of the redistribution. It is precisely this feature of redistributive legal rules that may help to reduce distortions in work incentives, as described above; but, as Professors Louis Kaplow and Steven Shavell point out, it also makes redistribution through

---

61. See Peter Harris, *Sufficient Grounds for Optimism?: The Relationship Between Perceived Controllability and Optimistic Bias*, 15 J. SOC. & CLINICAL PSYCHOL. 9, 10 (1996).

legal rules highly "ad hoc."<sup>62</sup> This Essay does not seek to balance these competing considerations; rather, it simply makes the (positive) point that along the efficiency dimension of distortion of work incentives by redistribution, there are reasons to think that redistributive legal rules may perform better than taxes.

### *B. Other Considerations*

In addition to their effects on work incentives and their fairness properties, redistributive legal rules and taxes differ in several other ways. First, as discussed above, redistributive legal rules by definition impose efficiency costs in terms of their effects on primary behavior. (For instance, actors may be deterred to an excessive (from an efficiency standpoint) degree under such rules.) Second, as noted in Part II.B, redistributive legal rules are less precise than taxes in identifying the targets of society's redistributive intentions. (Not all drivers are rich; not all pedestrians are poor.) Third, redistributive legal rules are likely to compare unfavorably with taxes in terms of the administrative costs of redistributing wealth. A large fraction of tort judgments tends to be eaten up by attorneys' fees and other administrative expenses, substantially limiting the amount of the recovery that actually flows to victims.<sup>63</sup> Fourth, redistributive legal rules are administered largely by courts (constrained, of course, by legislative enactments), while taxes are primarily the province of legislatures. It may be that judges are truer to society's redistributive preferences than legislatures are (or that the reverse is true), or that legislatures simply do not respond with changed tax regimes to judicial decisions adopting efficient but distributively unattractive rules.<sup>64</sup> These factors may bear heavily on the choice between redistributive legal rules and taxes.

## V. CONCLUSION

What effect do redistributive legal rules and taxes have on work incentives? Neoclassical economics suggests a clear answer: the two forms of redistribution have identical effects.<sup>65</sup> Behavioral law

---

62. See Kaplow & Shavell, *supra* note 2, at 675.

63. See George L. Priest, *The Current Insurance Crisis and Modern Tort Law*, 96 *YALE L.J.* 1521, 1560 (1987) (citing JAMES S. KAHALIK & NICHOLAS M. PACE, *RAND CORP., COSTS AND COMPENSATION PAID IN TORT LITIGATION* 71 (1986)).

64. See Calabresi, *supra* note 4, at 1224 n.36; Kennedy, *supra* note 3, at 469.

65. See *supra* notes 6-7 and accompanying text.

and economics suggests a different answer: work incentives may be distorted less by redistributive legal rules than by taxes, due both to the uncertainty associated with redistributive legal rules (tempered to some degree by insurance) and to the different ways in which the two forms of redistribution may be treated from a mental accounting perspective. This analysis of redistributive legal rules is of course only suggestive; in my view, the question whether redistributive legal rules or taxes cause greater distortion in work incentives is ultimately an empirical one and cannot be definitively resolved by the sort of analytic argument offered in the existing law and economics literature and in this Essay. My only purpose here has been to examine and, I hope, call into question the confident prediction in the existing literature that work incentives are distorted as much by redistributive legal rules as by taxes.

The question whether redistributive legal rules or taxes cause greater distortion in work incentives is fundamentally a positive question (and has been approached as such in this Essay), but the inquiry raises a pressing normative issue as well: if redistributive legal rules distort work incentives less than taxes do (and if this is so for the reasons suggested by behavioral law and economics), then is it proper for government to rely on redistributive legal rules to achieve its distributive objectives? The advantage of these rules over taxes stems from the fact that citizens do not perceive the same degree of redistribution as with taxes, but is it proper for government to make use of this error in citizens' perception?<sup>66</sup> If the suggestion of behavioral law and economics that work incentives may be distorted less by redistributive legal rules than by taxes ultimately proves to be correct (or at least persuasive), then these normative questions about redistributive legal rules will require our attention.

---

66. McCaffery, *supra* note 57, at 1942-43, raises similar questions about tax structures that exploit cognitive errors.

