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CORPORATE BEHAVIOR AND THE SOCIAL EFFICIENCY OF TORT LAW

John A. Siliciano*

Over time, proponents have defended the tort system on a number of policy grounds. Traditionally, normative goals such as fairness and individualized justice have been advanced as rationales.¹ The emergence during the last half-century of strict liability for defective products also saw the introduction of a number of more instrumental justifications: liability rules served to compensate victims, to distribute accident costs more widely across society, and to shift the risk of accidents to parties deemed more capable of avoiding such accidents or bearing their cost.² Most recently, these compensatory, risk spreading and deterrent rationales have largely coalesced into a unified theory that portrays and justifies the tort system as a mechanism for encouraging socially optimal choices between risk and safety.³

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1. See generally A.B.A. SPECIAL COMM. ON THE TORT SYSTEM, TOWARDS A JURISPRUDENCE OF INJURY: THE CONTINUING CREATION OF A SYSTEM OF SUBSTANTIVE JUSTICE IN AMERICAN TORT LAW 3.1-3.19, 4.41-4.52 (1984) [hereinafter A.B.A. REPORT]; Fletcher, *Fairness and Utility in Tort Theory*, 85 HARV. L. REV. 537 (1972); C. FRIED, AN ANATOMY OF VALUES 183-206 (1970).

2. See generally Priest, *The Invention of Enterprise Liability: A Critical History of the Intellectual Foundations of Modern Tort Law*, 14 J. LEGAL STUD. 461 (1985). For interesting commentary on the conflict between normative and instrumental justifications for tort law, see Weinrib, *The Insurance Justification and Private Law*, 14 J. LEGAL STUD. 681 (1985); Fletcher, *supra* note 1.

3. Although tort courts and traditional tort scholars have often justified tort rules on the ground that they deterred socially undesirable behavior by product manufacturers, see Owen, *Rethinking the Policies of Strict Products Liability*, 33 VAND. L. REV. 681, 703 (1980); A.B.A. REPORT, *supra* note 1, at 4.122, the actual model of tort law as an instrument for encouraging optimal levels of product safety has come from economic-oriented theorists. See, e.g., W. LANDES & R. POSNER, THE ECONOMIC STRUCTURE OF TORT LAW (1987) [hereinafter ECONOMIC STRUCTURE]; Landes & Posner, *A Positive Economic Analysis of Products Liability*, 14 J. LEGAL STUD. 535, 536 n.3 (1985) [hereinafter *Positive Economic Analysis*]; Landes & Posner, *Tort Law as a Regulatory Regime for Catastrophic Personal Injuries*, 13 J. LEGAL STUD. 417 (1984) [hereinafter *Catastrophic Injuries*]; Landes & Posner, *The Positive Economic Theory of Tort Law*, 15 GA. L. REV. 851 (1981) [hereinafter *Positive Economic Theory*]; Oi, *The Economics of Product Safety*, 4 BELL J. ECON. & MGMT. SCI. 3 (1973); Shavell, *Strict Liability versus Negligence*, 9 J. LEGAL STUD. 1 (1980); Brown, *Toward an Economic Theory of Liability*, 2 J. LEGAL STUD. 323 (1973). See also Calabresi, *Optimal Deterrence and Accidents*, 84 YALE L.J. 656 (1975); G. CALABRESI, THE COSTS OF ACCIDENTS: A LEGAL AND ECONOMIC ANALYSIS (1970).

None of these theorists argue that the tort system is achieving or can expect to achieve a

In essence, this model of tort law posits that producers who might otherwise face inadequate incentives to act with care will, if saddled through liability rules with the costs of injuries caused by defective products, seek to reduce such costs to optimal levels in order to remain competitive. They will do so by engaging in safety-related measures until the costs of further investments in safety exceed the amount of liability thereby avoided. At this equilibrium point, the producer will be behaving in a socially efficient manner — producing products with a cost-effective balance of safety and risk — and will have successfully minimized its combined avoidance and liability costs. All other factors being equal, such a producer should triumph in the marketplace over rivals who fail to solve correctly the safety-risk calculus.

At first glance, this social efficiency vision of the tort system appears both simple and powerful. Without the cumbersome prodding of direct regulation, indeed without any legislative action at all, manufacturers are propelled to manufacture products that embody society's largely unspoken preferences concerning the optimal mix of safety and risk. Even the product-related injuries that occur under this conception of the tort system take on a more benign character. No longer are these injuries the result of heartless indifference to consumer safety on the part of careless manufacturers; instead, they represent the inevitable expression of society's wise decision not to spend the extravagant resources required to eliminate the last traces of product risk. Such injuries may merit compensation, but not regret.

Indeed, the narcotic effect of the social efficiency model of tort is so strong that one easily forgets that it is simply a model, and one that has never been empirically tested.⁴ Moreover, the conclusion suggested — that competitive product markets in conjunction with tort rules naturally encourage optimal investments in safety — would probably strike the bulk of the public as preposterous.⁵ This pessi-

perfect balance between safety and risk. See, e.g., *Positive Economic Analysis*, *supra*, at 535 (system is "in the main" efficient but some rules are not); *Positive Economic Theory*, *supra*, at 864 (efficiency is dominant but not sole value of tort law; most tort rules are efficient). This article goes much further, however, and questions whether, in light of the impediments to efficiency it identifies, there can be any assurance that the product markets actually reflect anything approaching an optimal level of safety.

4. Testing of the model may be impossible. See note 9 *infra*. William Landes and Richard Posner, two of the model's proponents, do purport to test the model by presenting data showing a positive correlation between the process of urbanization and judicial rejection of the privity doctrine. This correlation, it is argued, shows the ability of courts instinctively to move from less efficient to more efficient rules as conditions require. *Positive Economic Analysis*, *supra* note 3, at 551-53. This article does not contest such a possibility, but instead questions whether the end result of such efficiency-enhancing moves will be a system capable of optimizing product safety.

5. Curiously, in their most recent writing Landes and Posner seemingly disavow any claim that tort law actually encourages efficient behavior. Instead, they limit their claim to the thesis that most tort rules, when viewed in the abstract, are consistent with an efficient system of laws.

mism is echoed by the very actors which the tort system seeks to influence.⁶ Thus, the most comprehensive study of corporate responses to tort liability found that the actual operations of the tort system, rather than encouraging producers to take optimal care, instead produced only an "indistinct signal" largely devoid of useful guidance.⁷

This article examines this dissonance between accepted theory and observed reality, between what the model envisions and what the tort system seems to deliver. After sketching the model in greater detail, the first section of the article reviews restraints within tort law on the achievement of efficient outcomes. The analysis then turns to the broader legal environment, and describes how legally sanctioned means of liability evasion — such as the corporate law⁸ doctrine of limited liability and the bankruptcy rules permitting discharge of obligations — may further undermine the practical utility of the social efficiency model of tort. The final section of the article examines tort

Thus, they note that "[e]ven if tort law does not have a significant effect on behavior, the theory advanced . . . is not refuted. Ours is a theory of the rules of tort law rather than of the consequences of those rules for behavior." *ECONOMIC STRUCTURE*, *supra* note 3, at 13. *See also id.* at 312 ("We argue that the law creates incentives for parties to behave efficiently rather than that they actually behave so.").

This qualification is perplexing, to say the least. If rules are labelled "efficient" based on their capacity to encourage parties "to behave efficiently" but in practice they have no effect on behavior, is the label of "efficient" truly warranted? Cannot an opposite rule deserve the same characterization as long as its practical operation does not cause parties to behave any less efficiently? Thus, it would seem that before tort law is labelled efficient on the ground that it "creates incentives for parties to behave efficiently," the practical capacity of that incentive structure to guide behavior must be considered. This article makes such an inquiry, and concludes that the tort system, despite its possibly abstract efficiency, confronts serious practical impediments to the encouragement of optimal behavior.

6. Such skepticism has appeared in some scholarly writing as well. *See, e.g.*, Henderson, *Product Liability and the Passage of Time: The Imprisonment of Corporate Rationality*, 58 N.Y.U. L. REV. 765, 766 (1983) ("That the reality falls far short of the ideal is obvious to anyone familiar with the product liability system."); Burrows, *Tort and Tautology: The Logic of Restricting the Scope of Liability*, 13 J. LEGAL STUD. 399, 414 (1984) ("[S]omething serious is wrong with analyses of tort law that make the tort system appear a good deal more successful than many observers have long believed to be the case."); Danzon, *Comments on Landes and Posner: A Positive Economic Analysis of Products Liability*, 14 J. LEGAL STUD. 569, 573 (1985) (model too simplistic to explain relevant data); Rizzo, *The Mirage of Efficiency*, 8 HOFSTRA L. REV. 641, 658 (1980) ("It is all too easy to show that efficiency leads to desirable results within simplified constructs; it is quite another thing to show what this has to do with the world in which we live.").

7. G. EADS & P. REUTER, *DESIGNING SAFER PRODUCTS: CORPORATE RESPONSES TO PRODUCT LIABILITY LAW AND REGULATION* vii (Rand Institute for Civil Justice Report No. R-3022-ICJ, 1983). The Rand study observed the responses of nine manufacturing firms "generally recognized as leaders in the safety field" to the operations of the tort system. *Id.* The study concluded that tort law, while imposing significant risks on such firms, produced "an extremely vague signal" regarding the direction such firms should move to minimize tort exposure. *Id.* at viii.

8. Despite the fact that dangerous products can be manufactured by noncorporate actors, the article focuses primarily on corporate law's impact on the social efficiency model because, as noted by Landes and Posner, "defendants in products liability cases are invariably corporations." *Positive Economic Analysis*, *supra* note 3, at 536.

reform's potential for overcoming such barriers to efficiency, and, in light of its pessimistic conclusion, suggests that rethinking the efficiency norm may be a more appropriate response.⁹

I. LIMITS WITHIN TORT LAW ON SOCIAL EFFICIENCY

A. *The Basic Model*

The social efficiency model¹⁰ begins with the assumption that the markets for products are reasonably competitive. In such a competitive market, if consumers knew all the risks embodied in various products they purchase, they would factor such risks into their purchasing decisions by decreasing the amount they would be willing to pay for a product as its riskiness increased.¹¹ This "informed" demand in turn should drive producers, even absent liability rules, toward a socially optimal level of safety.¹² In reality, however, few consumers are will-

9. Several words about methodology are in order. First, the article focuses on the products liability area, rather than the whole of tort law. Yet, as should become apparent, the concerns it raises touch on other areas of law, both within and outside tort, in which similar instrumental theories of market-generated efficiency have been advanced. Second, the article addresses the social efficiency model on its own terms; it largely relies on generalizations concerning producer behavior and market forces, rather than on empirical data, to assess the practical utility of the model. Indeed, true empirical testing of tort law's ability to generate efficient outcomes may be difficult, if not impossible. Products are introduced and withdrawn from the market continually, and withdrawal is often unrelated to safety concerns. Competing products may differ significantly in a variety of ways unrelated to safety. Manufacturers may adopt different pricing and advertising policies for similar products, and may compete only in portions of their overall product markets. Therefore, it may be impossible to identify two competing products that differ only with respect to safety in order to determine whether the market favors the product that optimizes safety-related costs. See also G. EADS & P. REUTER, *supra* note 7, at v ("Data do not exist to permit judgment of the reasonableness of the current system. It is not possible to measure the improvement, if any, in the level of safety of consumer goods that has resulted in changes in regulation and law.").

10. The model presented here is, to some extent, an amalgamation of the ideas of various tort theorists who have focused on the deterrent capacity of tort law, see authorities cited in note 3 *supra*, and thus the details of its presentation might not be subscribed to by all. It is, however, primarily drawn from the work of William Landes and Richard Posner, for that work most directly claims that the products liability system, as it now exists, "is best explained as if the judges who created the law . . . were trying to promote efficient resource allocation." *Positive Economic Theory*, *supra* note 3, at 851. See also *Positive Economic Analysis*, *supra* note 3, at 535 (tort rules for most part "consistent with efficiency"). Moreover, despite their professed positive perspective, Landes and Posner unquestionably proceed upon an implicit normative judgment that social efficiency is the proper end of tort law. See, e.g., Posner, *The Ethical and Political Basis of the Efficiency Norm in Common Law Adjudication*, 8 HOFSTRA L. REV. 487 (1980).

11. Indeed, in a perfect market with no information-gathering or transaction costs, consumers theoretically could bargain with producers for levels of product safety that matched their specific preferences. See *Positive Economic Analysis*, *supra* note 3, at 544.

12. *Id.* at 540 ("Since consumers will be willing to pay more if expected damages are lower, each manufacturer will have an incentive to take care, provided the higher price that consumers are willing to offer is enough to offset the cost of taking care."). Thus, if consumers were perfectly informed about product risk, the choice of liability rules would not effect the tort system's ability to achieve efficient outcomes. A rule of no liability, as well as a rule of absolute liability, would simply constitute alternate legal starting points from which producers and their perfectly

ing or able to bear the high costs of fully informing themselves about all the relative safety hazards posed by competing products. A prospective car purchaser, for example, might at most purchase a copy of *Consumer Reports* and read its safety analysis of competing car models. He will not, however, disassemble actual cars looking for hidden defects, or commission experts to analyze design features, or attempt to quantify remote risks he has succeeded in identifying. Nor will he, in any systematic fashion, compare the risks associated with driving to the risks of other options, such as walking, taking the bus, or staying put. The costs of such investigations — of becoming perfectly informed about product risks — are simply too great in relation to the benefits gained for consumers to bear.¹³

These informational deficiencies impair the ability of market forces to generate optimal levels of safety.¹⁴ Consumers, because they do not know or cannot accurately assess all the risks associated with the products they consume, may pay more for, or demand greater quantities of, certain products than they would if acting on perfect information. In so doing, they incorrectly signal their preferences for safety and risk, and thus unwittingly encourage manufacturers to produce excessive risk.¹⁵ Proponents of the social efficiency model of tort acknowledge this potential source of partial market failure, but view liability rules as an effective corrective mechanism.¹⁶ Such rules,

informed consumers would bargain towards optimal levels of safety. ECONOMIC STRUCTURE, *supra* note 3, at 63.

13. See ECONOMIC STRUCTURE, *supra* note 3, at 544. *But see* Danzon, *supra* note 6, at 571-73 (questioning model's assumption that informational barriers are insurmountable); Schwartz & Wilde, *Imperfect Information in Markets for Contract Terms: The Examples of Warranties and Security Interests*, 69 VA. L. REV. 1387 (1983) (arguing that only a portion of consumers need to be well informed in order to signal consumer preferences correctly).

14. *Positive Economic Analysis*, *supra* note 3, at 543-51. In addition to their inability to bear the costs of fully informing themselves about product safety risks, consumers as a class may be psychologically predisposed — even when acting on reasonably complete information — to systematically overestimate or underestimate risk, and to make inaccurate comparisons between competing risk producing activities. See, e.g., G. CALABRESI, *THE COSTS OF ACCIDENTS*, *supra* note 3, at 55-58; Schwartz, *Directions in Contemporary Products Liability Scholarship*, 14 J. LEGAL STUD. 763, 776 (1985); Henderson, *Extending the Boundaries of Strict Products Liability: Implications of the Theory of the Second Best*, 128 U. PA. L. REV. 1036, 1037 (1980); Slovic, Fischhoff & Lichtenstein, *Facts and Fear: Understanding Perceived Risk*, in SOCIAL RISK ASSESSMENT 190 (1980).

15. The converse, of course, is also true. An uninformed consumer demand may result in the production of some goods that are too safe or the consumption of such goods at inappropriate levels. From a purely efficiency-oriented view, a deviation in either direction is equally undesirable, since each represents an excessive expenditure of resources. As a practical matter, most tort scholarship focuses on the dangers of inadequate investments in safety, perhaps because the consequences of such actions are more easily discerned than are the more subtle and remote effects that occur when society budgets too much for safety. In any event, this article also focuses primarily on the danger of inadequate safety investment, but does so because of the potential of corporate and bankruptcy law skewing resource misallocations in this direction.

16. See, e.g., R. POSNER, *ECONOMIC ANALYSIS OF LAW* 166 (3d ed. 1986).

regardless of their specific nature, generate through liability judgments the equivalent of a social consensus concerning the costs of certain risks. These costs, when imposed on producers, replicate the incentives to optimize product safety that would exist if consumers were fully informed.

Specifically, the model sensibly postulates that firms seek to minimize the costs of production in order to remain competitive and maximize profits. Thus, if the costs of accidents caused by defective products are imposed through strict liability on a manufacturer, it will treat such costs as it does other operating expenses. It will seek to reduce such costs to an optimal level by undertaking safety-related measures — such as design changes, lower production levels, or better consumer education — until the incremental cost of further safety measures exceeds the incremental cost of the accident liability that might have been avoided through such additional measures.¹⁷ Such safety-related costs, along with the residual accident costs, will in turn be incorporated into the product's price, thus indirectly signalling consumers as to the relative riskiness of the products.¹⁸ Producers with inefficiently high accident costs will, if all other production costs are equal, be forced to price their products higher than their competitors in order to cover such costs. Put simply, the riskier of two otherwise identical products will cost more, and thus place its maker at a competitive disadvantage.¹⁹

From a policy perspective, then, the theoretical equilibrium between safety and risk that the social efficiency model of tort law envisions has much in its favor.²⁰ Accident-related costs are replaced with safety-related costs until society, through its impersonal comparative pricing of accidents and products, determines that further investment in safety is unwarranted. Under strict liability, the remaining accident

17. See, e.g., Posner, *A Theory of Negligence*, 1 J. LEGAL STUD. 29, 32 (1972). In theory, the same process of reducing combined accident and avoidance costs to optimal levels will occur regardless of whether a rule of negligence or strict liability applies. Henderson, *supra* note 6, at 768. The latter regime, however, affects not only the level of care exercised by producers but also the level of production of such goods. See Shavell, *supra* note 3, at 3-4; *Positive Economic Analysis*, *supra* note 3, at 541.

18. *Positive Economic Analysis*, *supra* note 3, at 556 (“[T]he information about risk is im-pounded in the higher price and ‘communicated’ to the consumer in a form that he can understand . . .”).

19. Of course, if the product market were perfectly competitive, and the products' features and production costs were truly identical but for their safety component, the riskier product would simply not sell because of its higher safety costs.

20. The social efficiency model is based on traditional utilitarian notions of proper business behavior. For a critique of the limits of utilitarian theory in regulating corporate behavior, see Stone, *Corporate Social Responsibility: What It Might Mean, If It Were Really to Matter*, 71 IOWA L. REV. 557 (1986).

victims, for whom preventive measures would have proved too costly, are compensated through liability rules. Perhaps most importantly, firms that fail to invest sufficiently in safety are eliminated as excessive accident costs render their product prices uncompetitive.

B. *Inevitability and Predictability*

Quite obviously, the ability of firms to make the socially optimal tradeoffs between safety and accident costs envisioned by the social efficiency model of tort depends heavily on the predictability of such costs and the inevitability of their imposition through the tort process.²¹ If, for example, a safety-related design change will add \$3 to the cost of a product, but is expected to save \$4 per unit by lowering *otherwise unavoidable* tort damages, safety costs should obviously be substituted for accident costs. But if a manufacturer by some means can avoid paying a portion of accident costs, it may forego preventive measures that are appropriate from a tort theory perspective. In other words, while society prefers that the manufacturer spend \$3 per unit for safety to avoid \$4 per unit in expected accident costs, such a safety-enhancing expenditure would be irrational from the firm's perspective if its own realized accident liability could be limited to \$2 per unit. Similarly, if a manufacturer simply cannot predict with any degree of certainty what its liability costs will be, it may forego safety-related expenditures that by hindsight would have been unquestionably rational.²²

To the extent that the absence of inevitability and predictability diverts firms from competing to reduce safety-related costs, the incentive structure of the tort system is impaired. Consumers, because they are unable to fully assess all the risks associated with competing products, must rely on the internalization of accident costs to signal relative risks. But when the internalization process is incomplete or inaccurate, consumers may not be able to identify those products that embody a socially optimal level of safety. As a result, when viewed retrospectively,²³ overall social investment in safety may be too low,

21. As used here, the concept of inevitability refers to the probability that a harm-causing producer will actually be forced to pay the full amount of whatever liability is legally incurred and imposed. The concept of predictability, on the other hand, relates to the certainty with which a producer can determine ahead of time the extent to which various production decisions will generate liability costs.

22. Conversely, if liability consequences cannot be accurately predicted, the manufacturer may err in the opposite direction and invest too heavily in safety. See note 15 *supra*.

23. Of course, proponents of the social efficiency model might properly object that the proper test is whether the tort system is efficient *ex ante*, i.e., whether its liability rules encourage producers to make decisions that minimize *expected* social costs, rather than whether the outcomes, *ex post*, of such decisions reflect society's preferences on risk and safety. This article does

compensation and risk spreading may be inadequate, and firms that do invest in optimal levels of safety may nonetheless go unrewarded by the market. In this regard, the expansion of product liability rules during this century can be viewed collectively as an effort to enhance the social efficiency of the tort system by increasing the inevitability and predictability of liability.²⁴

Consider, for example, the "citadel" of privity that insulated nineteenth-century manufacturers from tort liability when they lacked a direct contractual relationship with their product's ultimate consumer. This doctrine, although perhaps justifiable on other grounds,²⁵ undercut tort law's ability to penalize directly, through higher liability costs, those producers that underinvested in safety. A socially irresponsible producer — one that failed to strike the proper balance between safety and risk — that distributed its product through intermediaries might still incur lower accident costs and therefore market its product at a lower price than a responsible producer of the same product that dealt directly with the ultimate consumer.²⁶ The product market, "fooled" by the lower price of the riskier product, might tolerate a lower level of care, or a higher level of production, than was socially optimal. Judicial abrogation of the privity doctrine,²⁷ by eliminating a liability-evading strategy that bore no direct relation to enhanced safety, corrected this market distortion and focused the cost-reducing calculus of manufacturers more singularly on the issue of safety.²⁸

Similarly, the more recent shift from negligence to strict liability for defective products can be viewed as a means of improving the predictability of liability. While, unlike the privity doctrine, both negligence and strict liability address the issue of safety, the outcome of a case is more difficult to predict under negligence than under strict lia-

not challenge this general premise, but instead questions whether in a tort system, plagued by uncertainty and the potential for liability evasion, the concept of *ex ante* efficiency carries much substance. See text at note 53 *infra*.

24. A good historical account of the evolution of modern products liability law can be found in Schwartz, *New Products, Old Products, Evolving Law, Retroactive Law*, 58 N.Y.U. L. REV. 796 (1983).

25. See, e.g., Epstein, *Products Liability as an Insurance Market*, 14 J. LEGAL STUD. 645, 654-64 (1985) (arguing that privity limitation allowed manufacturers to better predict and insure against liability).

26. Of course, even under a privity regime, the producer's retail distributors would be exposed to full liability. Yet, as noted below, such liability buffers can be structured in such a way that the aggregate liability of the entire enterprise is less than that which would occur if the manufacturer stood in direct privity with the consumer. See text at notes 65-69 *infra*.

27. See Prosser, *The Assault upon the Citadel (Strict Liability to the Consumer)*, 69 YALE L.J. 1099 (1960).

28. Cf. *Positive Economic Analysis*, *supra* note 3, at 547-49 (arguing that abolition of privity enhanced efficiency because modern products are too complex for consumers to assess risks through inspection).

bility. Negligence, in essence, requires a manufacturer not only to predict the number of injuries that its products will cause, but also to make a fairly sophisticated legal judgment about the likelihood of liability. By limiting this second inquiry,²⁹ strict liability makes it easier for manufacturers to make reliable judgments about the benefits — in terms of lower liability costs — of further investments in safety.³⁰

This is not to suggest, however, that tort law has solved all problems of inevitability and predictability. Indeed, at the outer limits of reform the goals of greater predictability and greater inevitability may become incompatible.³¹ As an example, consider a mythical jurisdiction in which the sole standard governing tort liability is: “Market only reasonably safe products, or pay the consequences.” Assuming perfect enforcement, such a standard operates with complete inevitability. It tolerates no excuses to its proscription, and thus every producer feels the full impact of a failure to comply. Yet, despite its perfect after-the-fact inevitability, such a standard suffers from before-the-fact unpredictability. A producer, faced only with the standard, must make very difficult determinations as to what, in retrospect, will be considered “reasonably safe” and what will be the “consequences” of failure to meet this standard. Any errors in these predictions will cause the producer to inadvertently violate the standard.

The traditional response to such problems of predictability is to replace the vague, all-encompassing standard with more specific liability rules.³² The more detailed the rules, the more accurately the producer can assess various production options and select one that is socially optimal. Yet, for several reasons, this process of specification typically fails to produce completely predictable rules. First, regardless of whether such rules are generated legislatively, administratively, or judicially, obvious costs accompany enhanced predictability.³³ In the products liability context, for example, perfect predictability might

29. One must be careful not to overstate the “strictness” of strict liability. Although the rule eliminates the general inquiry into the reasonableness of the producer’s behavior, similar open-ended reasonableness inquiries reappear when the question concerns whether the product was defective as designed or marketed. See Henderson, *Coping With the Time Dimension in Products Liability*, 69 CALIF. L. REV. 919, 925-26 (1981); *Positive Economic Analysis*, *supra* note 3, at 554. Thus, to some extent, the uncertainty that surrounds negligence determinations still survives under a “strict” product liability regime.

30. See Henderson, *supra* note 14, at 1040; Henderson, *supra* note 29, at 932-33.

31. See generally D’Amato, *Legal Uncertainty*, 71 CALIF. L. REV. 1 (1983); Ehrlich & Posner, *An Economic Analysis of Legal Rulemaking*, 3 J. LEGAL STUD. 257 (1974); Kennedy, *Form and Substance in Private Law Adjudication*, 89 HARV. L. REV. 1685 (1976).

32. See, e.g., D’Amato, *supra* note 31, at 37-38; Ehrlich & Posner, *supra* note 31, at 261.

33. See generally Ehrlich & Posner, *supra* note 31, at 267-68.

be achieved only if the rules specified precisely — down to the last nut and bolt — the design and characteristics of a reasonably safe, liability-free product. Even the most detailed safety rules now existing, such as those in the occupational safety area, fall short of such total specificity, and thus suggest the existence of an irreducible minimum of uncertainty that is too costly to eradicate through prescriptive rulemaking.

Moreover, the effort to increase predictability by substituting specific rules for general standards typically proceeds at the expense of the inevitability of the legal regime as a whole. In this process of specification, the comprehensive, general standard must be retooled into an entire set of more precise rules governing numerous situations. While any individual rule might be inevitable in its application, the limits of human foresight, the imprecision of language, and the corrosive effects of time make it highly improbable that the *set* of specific rules fashioned to replace a general standard will cover exactly the same conduct as that covered by the standard.³⁴ Instead, the set of such rules is likely to be both underinclusive and overinclusive with respect to the standard, and less capable of adapting to changing social attitudes regarding safety. Thus, the process of specification, while decreasing problems of predictability, increases problems of inevitability by generating a dissonance between the standard society wishes producers to follow and the rules it establishes to clarify that standard.³⁵

This root conflict between the inevitability and the predictability of rules suggests that the most a legal system can strive for is an optimum balance between the two. That is, the best liability regime that can actually be realized is neither perfectly predictable nor perfectly inevitable, but instead is one that balances these factors to the point that increasing one will cause a greater diminution of the other.

Replacing tort theory's implicit assumption of perfect predictability and inevitability with the notion of an equilibrium between the two, however, has some unpleasant implications for the capacity of the tort system to generate efficient outcomes. Because even an optimally designed rule is unlikely to be completely inevitable, producers of excessive risk may nonetheless escape bearing the full cost of such harm by virtue of a loophole or oversight in the liability rule. Similarly, the residual uncertainty concerning application of the rule may cause even

34. D'Amato, *supra* note 31, at 39 ("[R]eal-world variety outstrips the ability of legislatures to catch up to the ingenuity of persons who, disadvantaged by the law on the books, modify and adjust their conduct to cast doubt upon any attempt . . . to bring them to legal account.").

35. See Ehrlich & Posner, *supra* note 31, at 268 ("Greater specificity of legal obligation generates allocative inefficiency as a result of the necessarily imperfect fit between the coverage of a rule and the conduct sought to be regulated.").

those producers that strive to predict and balance safety and accident costs — that is, to act in a socially efficient manner — to fall somewhat askew of the mark.³⁶ Whether such producers still retain a competitive advantage over unsafe producers, as suggested by the social efficiency model, is a difficult and largely empirical question. At the very least, however, the inherent limits on simultaneously improving predictability and inevitability sully the model's surface tidiness with the prospect of unavoidable errors by manufacturers striving to solve the safety calculus.

C. *Risk Uncertainty and Rule Instability*

Aside from these theoretical limitations on formulating liability rules, the operation of the tort system may generate uncertainties that undermine the goal of social efficiency. As noted, the social efficiency model of tort anticipates that manufacturers will price their products to cover accident costs. However, unlike most other types of production costs,³⁷ accident costs generally are not distributed evenly across a product line. Typically, not all units produced will be defective, not all defective units will ultimately cause injury, not all injuries will be the same, and not all injured parties will pursue tort remedies and succeed. Within limits, however, these sorts of uncertainties pose no real problem for the effective functioning of tort law. As long as a manufacturer can reasonably predict the total liability that a product line will incur over its lifetime, it can incorporate in the price of each unit an amount that, when aggregated across the entire product line, will cover all accident costs.³⁸

Under certain circumstances, however, this predictive process may falter. First, as several of the recent "mass tort" cases illustrate, some risks from a product may not be discovered until long after it has entered the marketplace. These "remote" risks pose a particularly difficult dilemma for the manufacturer. The manufacturer could engage in

36. Indeed, if the liability consequences of various production decisions become too unpredictable, manufacturers may find it more cost-effective to invest in the appearance of safety and the intensive litigation of safety issues, rather than in safety itself. See Oi, *Tort Law as a Regulatory Regime: A Comment on Landes and Posner*, 13 J. LEGAL STUD. 435, 439 (1984).

37. For example, labor, energy, and raw material costs involved in the manufacture of a product are typically constant throughout a production run.

38. A manufacturer may handle this process itself, thus self-insuring. More commonly, however, product manufacturers contract with a commercial insurer for coverage of at least a portion of their product liability claims. In either case, the manufacturer is seeking to insure that sufficient funds will be available to compensate the victims of accidents that were not worth avoiding. For a discussion of the actual methods of estimating products liability costs, see INTERAGENCY TASK FORCE ON PRODUCT LIABILITY, U.S. DEPT. OF COMMERCE, FINAL REPORT V-9 to V-17 (1978) [hereinafter TASK FORCE REPORT].

an extensive research and testing program aimed at uncovering all such risks, but at some point the costs and delay involved in such a program become prohibitive.³⁹ Moreover, such a program may still fail to identify all risks associated with the product. Thus, the manufacturer of a new product typically decides — somewhere short of perfect information — what liabilities are likely to be associated with the product.⁴⁰ But if this estimate is wrong, and the harm caused by the product is more severe than estimated, the tort system may impose unanticipated costs on the manufacturer.⁴¹ In such cases, the social efficiency model might still characterize the producer's original behavior as "efficient," for the producer has attempted to minimize the expected social costs of its production decision. Yet such a label holds little comfort for a producer rendered insolvent by unforeseen liabilities.

In addition, even if all risks are known, instability in tort law itself may impair the predictive function. For example, modifications of tort doctrine — such as the movement from negligence to strict liability, the abandonment of privity, the emergence of market share causation theories, or the rapid expansion of successor liability theories — may, as noted above, ultimately improve the efficiency of tort law by increasing the inevitability of liability. In the short run, however, such doctrinal shifts may impose new and unanticipated⁴² liabilities on manufacturers that render incorrect their previous predictions regarding the optimal level of investment in safety.⁴³ Similarly, more subtle

39. See G. EADS & P. REUTER, *supra* note 7, at 61 ("Actions that either add to direct cost or require additional time increase the probability that the product will fail to earn its required return in the marketplace."). For a thorough treatment of the problem of determining how extensively manufacturers should investigate for remote risk, see Schwartz, *Products Liability, Corporate Structure, and Bankruptcy: Toxic Substances and the Remote Risk Relationship*, 14 J. LEGAL STUD. 689 (1985). See also Danzon, *Tort Reform and the Role of Government in Private Insurance Markets*, 13 J. LEGAL STUD. 517, 534-41 (1984).

40. Schwartz, for example, argues that a manufacturer should not be held liable for injuries caused by unforeseen risks if "the expected costs of a research project that might have disclosed how dangerous the product actually is exceeded the expected gain from knowing this." Schwartz, *supra* note 39, at 694-95.

41. Thus, while one may debate precisely when the asbestos industry should have been aware of the full extent of danger caused by its product, no one appears to argue that such knowledge of risk was available at the outset of production. *Id.* at 693, 701-02. In hindsight, however, it is clear that this inadequacy in the understanding of long-term risks of asbestos resulted in a gross deviation from the social efficiency production and use of asbestos. Even using the most extreme version of when asbestos manufacturers knew of the risks associated with their product, manufacturers would still have produced far too much asbestos and sold it at far too cheap a price.

42. See, e.g., *Beshada v. Johns-Manville Prods. Corp.*, 90 N.J. 191, 447 A.2d 539 (1982) (holding asbestos manufacturer liable for failure to warn of risk that court concedes was scientifically unknowable at time of product's sale).

43. The history of vaccine production in the United States provides a ready example. The smallpox vaccine was administered during a period of relative stability in tort law; manufacturers were generally held harmless for adverse side effects in light of the overwhelming social consen-

shifts in popular attitudes regarding risk can affect the safety calculus by, for example, reclassifying a formerly acceptable product risk as unreasonably dangerous or revaluing the cost of a life or a limb.⁴⁴

These forms of true uncertainty — unforeseen risk and doctrinal instability — obviously undercut the practical utility of tort law as a device for encouraging optimal investments in safety.⁴⁵ Yet tort courts have, by and large, overlooked the critical impact of such forms of uncertainty on the effective functioning of tort law.⁴⁶ And to the extent that they have perceived the problem, their response is often strikingly simplistic. Insurance is invariably prescribed as a universal salve for the problems of uncertainty;⁴⁷ tidy, periodic premiums replace the chaos of predicting future liability, thus allowing the manufacturer to make rational choices between paying for accident avoidance or for accident compensation.

Unfortunately, this near-religious faith in insurance is seriously misguided.⁴⁸ The premiums set by an insurer are derived from the same predictive process used by a self-insuring manufacturer, and thus are subject to similar limitations.⁴⁹ An insurer, like a manufacturer,

sus concerning the value of the program. The polio vaccines, however, confronted a tort system beginning to abandon this negligence-based concept in favor of the emerging doctrine of strict liability. This change, combined with others, resulted in substantial, unforeseen tort judgments against producers. See Huber, *Safety and the Second Best: The Hazards of Public Risk Management in the Courts*, 85 COLUM. L. REV. 277, 286-89 (1985). As such uncertainties continue, many drug manufacturers have abandoned the vaccine market altogether. See note 111 *infra*.

44. See generally Henderson, *supra* note 29.

45. See G. EADS & P. REUTER, *supra* note 7, at 21; Danzon, *supra* note 39, at 534-36; Epstein, *The Temporal Dimension in Tort Law*, 53 U. CHI. L. REV. 1175, 1190-92 (1986). Cf. Rizzo, *Law Amid Flux: The Economics of Negligence and Strict Liability in Tort*, 9 J. LEGAL STUD. 291, 305 (1980) ("To hold a defendant liable for unforeseeable kinds of damage will not encourage him to abstain from the harm-producing activity or to undertake any avoidance measures. . . . [L]iability under such circumstances is genuinely without efficiency-enhancing value.").

46. Some proponents of the social efficiency model of tort law have recognized, to some extent, the potentially debilitating effect of such uncertainty on the model's functioning. See *Positive Economic Analysis*, *supra* note 3, at 566-67 (noting long product life of many modern goods creates greater chance of legal error in assessing liability).

47. Indeed, most of the central decisions in the development of modern products liability law expressly rely on the availability of insurance as a factor justifying expansion of liability. See, e.g., *Cyr v. B. Offen & Co.*, 501 F.2d 1145, 1154 (1st Cir. 1974); *Escola v. Coca Cola Bottling Co.*, 24 Cal. 2d 453, 462, 150 P.2d 436, 440-41 (1944) (Traynor, J., concurring); *Ray v. Alad Corp.*, 19 Cal. 3d 22, 33 560 P.2d 3, 10 136 Cal. Rptr. 574, 581 (1977); *Sindell v. Abbott Laboratories*, 26 Cal. 3d 588, 610-13, 607 P.2d 924, 936-38, 163 Cal. Rptr. 132, 144-46 (1980). See generally Epstein, *Products Liability as an Insurance Market*, 14 J. LEGAL STUD. 645, 648 (1985) ("The silent assumption . . . shared by much of the modern writing about products liability law, is that the availability and affordability of liability insurance should be taken as a given that survives whatever the choice of liability rules.").

48. See Priest, *The Current Insurance Crisis and Modern Tort Law*, 96 YALE L.J. 1521 (1987) (discussing failure of courts to understand interaction of legal rules and insurance function).

49. See Danzon, *supra* note 39, at 536 ("[S]ociolegal risk creates parameter uncertainty by destroying the insurer's ability to predict the loss distribution with any accuracy."). If anything,

must attempt to estimate future liability based on known information concerning a product's risks and the legal system's translation of such risks into accident costs. An unforeseen risk, by definition, cannot be included in the predictive process used to set an insurance premium or establish the level of contributions to a self-insured producer's reserve fund. And changes in the tort process, while arguably more foreseeable than remote product risks,⁵⁰ are nonetheless generally too unpredictable to be accounted for accurately in projecting future accident costs.⁵¹ Thus, rather than constituting an "exogenous given"⁵² capable of taming all uncertainties, insurance serves a far more modest function of imposing certainty where risks and liabilities are already reasonably predictable. But it can do little to handle the two forms of true uncertainty noted above. This limitation has important implications for the practical capacity of tort law to generate efficient outcomes.

D. *Is Efficiency Still Meaningful?*

Thus, even within the domain of tort law, various forces impair the mechanical precision of the social efficiency model. Under such circumstances, perhaps the best that producers can strive for is to *approximate* a socially optimal level of product safety. For proponents of the model, however, this might be enough. Since all producers, smart and dumb, good and evil, must compete within the confines of a liability system that lacks perfect certainty and inevitability, perhaps those that ultimately triumph in the competitive struggle despite these handicaps can still be characterized as efficient actors.

commercial insurers may, despite their expertise, be less accurate in their loss predictions concerning any particular manufacturer. This is because such insurers generally lump multiple risks and set premiums on the basis of industry-wide accident rates rather than the experience of each individual producer or product. See Morris, *Enterprise Liability and the Actuarial Process — the Insignificance of Foresight*, 70 YALE L.J. 554, 564-74 (1961); TASK FORCE REPORT, *supra* note 38. See generally Priest, *supra* note 48.

50. Professor Gary Schwartz argues that holding manufacturers liable under tort rules adopted after the conduct in question has occurred does not necessarily defeat the reasonable expectations of the manufacturer. "As long as the general rules of the game make clear in advance that the specific rules of the game are subject to change, the player cannot complain about per se unfairness merely because such a change is in fact effected." Schwartz, *supra* note 24, at 817. But for a proponent of the social efficiency model, this estoppel-based notion is obviously not enough. The ability of producers to determine what constitutes socially efficient behavior depends not simply on anticipating that the law may change, but also on being able to predict precisely the liability costs involved in such changes. Yet, as Schwartz himself demonstrates, there are multiple factors that bedevil even a manufacturer who deliberately attempts to predict such doctrinal shifts. *Id.* at 826-28. Thus, as he notes, "when the goal of tort law is to influence defendant behavior, it is a dubious practice to apply a novel rule retroactively." *Id.* at 828.

51. See *id.* at 825 (criticizing retroactive application of unforeseeable liability rule as ineffective in spreading risk and promoting efficient production and pricing decisions).

52. Epstein, *supra* note 47, at 654.

It is critical to note, however, precisely how pale this concept of *ex ante* efficiency can become. As predictability and inevitability decrease, the value of liability rules in establishing clear *incentives* for proper behavior correspondingly declines. To be sure, the rules may still impose excessive costs on some producers after the fact, should their previous calculations prove incorrect. But such sanctions are more likely to be viewed as random penalties devoid of meaning than as costs that could have been avoided with more diligence and forethought.⁵³ At the same time, other producers may be rewarded in the market for their "efficient" behavior even though such behavior, realistically viewed, constitutes nothing more than good guessing.⁵⁴ Thus, in the worst case, efficiency is transformed from a conduct guiding norm to a rather impoverished descriptive label.

This scenario, in which residual vagueness, remote risk, and doctrinal instability undercut the tort system's ability to provide useful signals to producers, still assumes that all producers are equally subject to, and influenced by, whatever dictates the tort system still manages to provide. But as shall be seen, features of other areas of law make even this mild assumption problematic.

II. TORT LAW AND COMPETING INCENTIVES

The actors tort law seeks to control also respond to incentives and constraints created by other bodies of law, and in some cases these influences run counter to those of tort law. Thus, for example, the tax code, the mechanics of insurance, and the rules regarding indemnification all affect, to some extent, the liability-related behavior of producers. This article, however, focuses on corporate and bankruptcy law, for these components of the broader legal environment pose the most direct challenge to the incentive structure of tort law. Specifically, while the efficacy of tort law depends on the imposition of full liability on all actors for their torts, the keystone of both corporate and bankruptcy law is the ability of firms, under some circumstances, to avoid paying all or part of their liabilities.⁵⁵ Indeed, from the perspective of

53. See generally G. EADS & P. REUTER, *supra* note 7 (discussing inability of tort system to convey useful signals to producers).

54. See generally Alchian, *Uncertainty, Evolution, and Economic Theory*, 58 J. POL. ECON. 211, 213 (1950) ("[T]he greater the uncertainties of the world, the greater is the possibility that profits would go to venturesome and lucky rather than to logical, careful, fact-gathering individuals.").

55. The concept of evasion discussed here should be distinguished from the efforts of firms to limit liabilities by vigorously defending against tort suits, negotiating favorable settlements, and so forth. In those cases, a producer is simply attempting to avoid, defer, manage, or limit the actual imposition of a judgment of liability. Such actions are consistent with the social efficiency model, for that model assumes that the litigation process is an appropriate vehicle for establish-

a business lawyer, the failure to consider liability containment and avoidance in structuring corporate transactions can often constitute malpractice.⁵⁶ Thus, any realistic assessment of the social efficiency model must include an inquiry into the nature and impact of such liability-avoiding strategies.

A. *The Nature, Benefits and Costs of Liability Evasion*

The legal system's acceptance of liability evasion is reflected most clearly in the corporate law doctrine of limited liability, now prescribed by statute in virtually all jurisdictions.⁵⁷ Under a limited liability regime, the owners of a corporation are, absent exceptional circumstances,⁵⁸ completely shielded from personal liability. In the event that the value of claims against the corporation, including those based on tort liability, exceeds the value of the corporation's assets, the owners stand to lose only their investment in the corporation. This cap on liability serves a number of important — and beneficial — functions. It encourages business formation by sparing entrepreneurs the threat of personal financial ruin. Similarly, limited liability widens the social base of business ownership and improves the liquidity and efficiency of the equity markets by limiting the risks faced by shareholders to the size of their investment. It also frees investors of the high costs of individually monitoring management behavior that they would otherwise incur if the firm's business failure could be visited without limitation on them regardless of their equity stake in the company. Finally, limited liability may decrease the cost of capital by shifting a portion of the risks of insolvency to creditors who, as a class, may be more efficient risk-bearers than shareholders.⁵⁹

ing the true costs of accidents. Thus, a manufacturer that vigorously opposes a tort plaintiff's claim is not evading liability but is instead seeking an accurate determination of the existence of liability. The concept of liability evasion used here, in contrast, pertains solely to devices that allow producers to avoid *paying* liabilities that already have been established.

56. See note 127 *infra*.

57. See generally Easterbrook & Fischel, *Limited Liability and the Corporation*, 52 U. CHI. L. REV. 89 (1985); Halpern, Trebilock & Turnbull, *An Economic Analysis of Limited Liability in Corporation Law*, 30 U. TORONTO L.J. 117 (1980); Hamilton, *The Corporate Entity*, 49 TEXAS L. REV. 979 (1971); Manne, *Our Two Corporate Systems: Law and Economics*, 53 VA. L. REV. 259 (1967).

58. Courts in equity traditionally have "pierced the veil" of limited liability if a corporation was grossly undercapitalized with respect to its potential obligations, the corporate form was employed to defraud, or the owners of the corporation significantly failed to observe corporate formalities. Although the wisdom of and justifications for such intervention have been much debated, see generally Hamilton, *supra* note 57; Easterbrook & Fischel, *supra* note 57, it is important to note that limited liability is universally upheld when the sole argument for disregarding the doctrine is that a corporation's liabilities, including tort judgments, have exceeded its assets.

59. See generally Easterbrook & Fischel, *supra* note 57, at 93-97 (summarizing justifications for limited liability).

Despite its utility, however, the doctrine of limited liability poses special problems for an incentive system, such as tort law, that relies on the full incorporation of expected accident costs into product prices as a means of signalling consumers about relative product risks. Consider, for example, a product that can be produced in two different forms. In one form, the product is expected to incur accident costs with an average present value⁶⁰ of \$4 per unit, and cost \$2 to produce. Thus, the product must be priced at \$6 per unit simply to cover liability and production costs. Produced a different and safer way, however, the product will incur lower expected accident costs — say, \$2 per unit — but cost slightly more — \$3 per unit — to produce. The social efficiency model predicts that a rational firm will identify and choose this second method, for doing so minimizes combined safety and liability costs and thereby allows the firm to market the product at a lower, more competitive price — just over \$5 — and still make a profit.

This decisionmaking model assumes that producers will consider the full cost of accidents when making production and pricing decisions. Accident costs differ, however, from other production costs in that significant delays often exist between the initial production decisions and the imposition of liability. Defective products may not cause injuries, or the injuries may not manifest themselves, for significant periods of time.⁶¹ Even after injuries have occurred, years can be consumed in litigation before claims are reduced to judgments and those judgments are satisfied. This delay creates the potential, at least in the short run, for a third production and pricing decision in which the firm markets the product in its more dangerous form, but does not incorporate ultimate liability costs into the price.⁶² Thus, in the above example, a firm unconcerned with delayed liability costs could market the product in its more dangerous form for just over \$2 — the basic production costs — and still earn a profit.

The doctrine of limited liability directly encourages adopting this strategy of ignoring delayed liability costs. If the law enforced a regime of *unlimited* liability — pursuing the producer, and its owners if

60. Although product-related accidents will occur in the future, the producer must select the appropriate mixture of accident and avoidance costs when the initial production decision is made. Thus, rather than basing its calculation on the full costs of accidents that might occur, the producer need only compare the discounted present value of such expected accident costs against the costs of altering the production process to avoid such accidents.

61. See generally Schwartz, *supra* note 39.

62. See *id.* at 710 (if imposition of accident costs is delayed, business might seek to “earn enough in the accident-free period to recover start-up costs and make a profit”), 715 (in “‘delayed risk’ contexts, limited liability actually can create a pathological incentive for entrepreneurs to operate firms without full insurance and thereby to externalize risk”).

necessary, until all liabilities were satisfied — a liability avoidance strategy of this type would make little sense. The inflated initial profits would eventually be absorbed by the onset of liabilities, and the firm would ultimately suffer a competitive disadvantage because it marketed the product in a socially inefficient form. But limited liability prevents this day of reckoning from occurring by immunizing the firm's owners from liability once the claims exceed the value of the firm. To be sure, the crushing onset of tort liability will eventually compel liquidation of the firm,⁶³ but prior to its elimination from the market it will have produced excess risk from a social efficiency perspective.⁶⁴

Other business strategies similarly allow producers to ignore or discount delayed liability costs when making production and pricing decisions. For example, a manufacturer may further exploit the doctrine of limited liability by placing its riskier activities in a separate subsidiary corporation, thereby limiting its actual accident costs to the amount of its investment in the subsidiary.⁶⁵ Alternatively, a firm that

63. *Id.* at 715. Nor is the eventual elimination of liability-evading firms from the market sufficient to achieve social efficiency. See text at notes 103-05 *infra*.

64. Consistent with the social efficiency model, this portrayal of the negative impact of limited liability assumes that consumers are poorly informed about the liability-evading potential of the producers whose products they purchase. If the opposite were true, limited liability would pose no problem for the effective functioning of the tort system. Consumers would simply pay less for products manufactured by firms that might seek to avoid full liability, because in such cases the consumer would bear the cost of insuring against the residual loss evaded by the producer. In this sense, the problem of limited liability directly parallels the problem of product safety: if consumers are fully informed, they can alter their purchasing behavior to account for different levels of risk, but if they are poorly informed, the tort system to be efficient must develop an alternate means of signalling product safety.

Unfortunately, the social efficiency model only appears to account for one form of informational deficiency. It assumes that consumers are inadequately informed about product safety, and thus views strict liability as a necessary means for indirectly compounding safety information into product price. See notes 10-19 *supra* and accompanying text. But it pays little attention to the parallel problem of inadequate consumer understanding of the liability-evading potential of individual producers even though, as a practical matter, consumers are likely to be at least as ill-informed on this issue as on that of product safety. See note 104 *infra*.

65. See generally Blumberg, *Limited Liability and Corporate Groups*, 11 J. CORP. L. 573 (1986); Landers, *A Unified Approach to Parent, Subsidiary, and Affiliate Questions in Bankruptcy*, 42 U. CHI. L. REV. 589 (1975). The strategic use of subsidiaries alone does not necessarily impair the efficient functioning of the tort system. If the subsidiary, operating as an independent business, is fully responsible for accident costs caused by its products, it in theory will invest in safety until it reaches the appropriate equilibrium. Yet, in practice, subsidiaries seldom operate independently of the interests of their parent, and in some situations the parent's interests might dictate that the subsidiary underinvest in safety. For example, if problems of predictability make it impossible for the parent to reach an appropriate choice between safety costs and accident costs for a particular product, it may use a subsidiary in order to fix arbitrarily an outer limit on its accident costs. The parent will then use this limit — the net worth of the subsidiary — in determining how much to invest in safety. But because the net worth of the subsidiary may be significantly less than the total accident costs caused by the subsidiary's products, the aggregate level of investment in safety may be inadequate. In essence, the subsidiary will be sacrificed to contain liability. See Easterbrook & Fischel, *supra* note 57, at 110-11.

has underinvested in safety may sell off its assets, distribute the proceeds, and dissolve before being overwhelmed by tort liability.⁶⁶ Or such a firm may seek to modify or discharge its tort liability through a reorganization under Chapter 11 of the bankruptcy code.⁶⁷ The details of such strategies have been explored elsewhere,⁶⁸ and will not be repeated here; what is critical to note, however, is that all such forms of evasive behavior encourage a firm in the short run to produce and price its product without fully taking into account, as part of its ongoing costs of production, the tort liability it will ultimately incur.

Indeed, liability evasion may occur even when a producer does not deliberately embark on such a strategy. A manufacturer that is simply inept at managing safety issues, or indifferent to them, may fail to solve the social efficiency calculus and thus end up marketing a product that is priced too low to cover the accident costs that will ultimately occur. Because of the erroneous decision, such a manufacturer will enjoy an "unfair" short-term competitive advantage over its more responsible rivals. If it distributes the profits thereby earned to its owners before the onset of liabilities, the corporate and bankruptcy law limitations on liability just discussed will prevent full recovery of accident costs. Thus, properly viewed, liability-limiting strategies represent both a planning technique for firms actively seeking to ignore the directives of tort law and a partial, *post facto* absolution for those that unintentionally do so.⁶⁹

Fortunately, evasion of tort liability is hardly a universal practice. Most businesses, most of the time, strive to anticipate and pay off their obligations.⁷⁰ This voluntary acceptance of full liability reflects, in

66. See Schwartz, *supra* note 39, at 714, 720-22; see generally Roe, *Corporate Strategic Reaction to Mass Tort*, 72 VA. L. REV. 1 (1986); Henn & Alexander, *Effect of Corporate Dissolution on Products Liability Claims*, 56 CORNELL L. REV. 865 (1971).

67. The most notable examples of such conduct, of course, are the reorganizations in bankruptcy of Johns-Manville Corporation, plagued by asbestos-related claims, and A.H. Robins Company, the subject of numerous suits regarding its Dalkon Shield contraceptive device. See generally Roe, *Bankruptcy and Mass Tort*, 84 COLUM. L. REV. 846 (1984); Note, *The Manville Bankruptcy: Treating Mass Tort Claims in Chapter 11 Proceedings*, 96 HARV. L. REV. 1121 (1983); Note, *Tort Creditor Priority in the Secured Credit System: Asbestos Times, the Worst of Times*, 36 STAN. L. REV. 1045 (1984); Goldner, *Final Justice for A.H. Robins*, AM. LAW., Oct. 1986, at 32.

68. See notes 65-67 *supra*.

69. The recent efforts of Johns-Manville Corporation and A.H. Robins to modify their potentially overwhelming tort liabilities in bankruptcy provide ready examples of companies turning to liability avoidance as a last resort. The widespread precautionary use of subsidiaries by firms that plan to fully pay liabilities reflects a similar dynamic.

70. A corporation, for example, may place its riskier operations in separate subsidiaries in order to limit its own liabilities, but this protection will not actually come into play until the subsidiary is so overwhelmed by tort claims that it becomes insolvent. The sacrifice of the subsidiary, then, is necessary to limit the liability of the parent, and the parent might determine to the contrary that the subsidiary is more valuable alive than dead. In such a case, the potential

part, the fact that evasive behavior often carries with it an array of costs and collateral considerations that militate against liability avoidance. Most significantly, all forms of evasive behavior require the firm or subsidiary to liquidate or go through reorganization in order to evade full liability. Thus, as a threshold matter, the economic merits of liability avoidance will depend on whether it is more profitable for the enterprise to “live fast and die young” or to strive for permanence by playing within the rules.⁷¹

Moreover, even when the shield of limited liability is invoked, the costs may extend beyond the mere liquidation of the firm. In the subsidiary context, for example, the parent suffers a number of adverse consequences when it uses subsidiaries to limit liability. Consumer confidence in other product lines of the parent may be damaged if tort judgments overwhelm one of its subsidiaries.⁷² Bankruptcy of the subsidiary may also impair the parent's creditworthiness, since lenders will naturally be more concerned about the security of loans to a business that has suffered a partial failure.⁷³ Similarly, if the parent's stock is publicly traded, the securities market may exert a disciplining effect.⁷⁴ Organizational pride and managerial professionalism may further discourage liability evasion even when such behavior is rational from a narrow profit-or-loss perspective.⁷⁵ Finally, the personal reputations and career ambitions of the subsidiary management may inhibit the use of liability-limiting strategic behavior.⁷⁶

These secondary costs of liability evasion — in terms of injury to consumer confidence in other products, organizational pride,

limitation of liability offered by the corporate form will be of no direct use; the subsidiary's operations will be structured in a socially efficient manner so that tort liabilities can be fully paid without jeopardizing the subsidiary's existence.

71. Indeed, as Alan Schwartz has demonstrated, in a world in which all risks are known and where liabilities are rapidly imposed, a manufacturing firm would typically either plan to pay all liabilities fully despite the existence of limited liability, or not operate at all. This is because much of the value of the firm is tied up in its future income stream, and thus the benefits of that income stream can only be realized if liabilities are not allowed to overwhelm the firm. Schwartz, *supra* note 39, at 708-10.

72. See Roe, *supra* note 66, at 25; G. EADS & P. REUTER, *supra* note 7, at 50 (“[T]he major cost of a defect may be the loss of ‘reputational capital.’”).

73. Cf. Easterbrook, *Two Agency-Cost Explanations of Dividends*, 74 AM. ECON. REV. 650, 654 (1984); Coffee, “No Soul to Damn: No Body to Kick”: An Unscandalized Inquiry into the Problem of Corporate Punishment, 79 MICH. L. REV. 386, 403 (1981); Roe, *supra* note 66, at 26.

74. See, e.g., Manne, *Mergers and the Market for Corporate Control*, 73 J. POL. ECON. 110, 117 (1965); Fama, *Agency Problems and the Theory of the Firm*, 88 J. POL. ECON. 288, 292-302 (1980).

75. See Roe, *supra* note 66, at 24 (“The destruction of the firm's operations for shareholder benefit would clash with the professional's operational ethic.”).

76. See Easterbrook & Fischel, *supra* note 57, at 107 (“Managers who have firm-specific investments of human capital cannot diversify the risk of business failure.”).

creditworthiness, equity value, and individual and institutional interests in reputation and permanence — potentially apply to all forms of strategic behavior, and probably explain why examples of liability avoidance are relatively uncommon.⁷⁷ Yet, the mere fact that corporate law allows some manufacturers to avoid part or all of the accident costs of their operations poses a significant theoretical challenge to the social efficiency model of tort law. As obvious as this conflict between tort theory and corporate law may seem, however, it has been all but ignored by most tort theorists.⁷⁸ A tort defendant, it has generally been assumed, is a tort defendant, fully subject to the force of liability rules. But a closer examination of how tort rules and the incentives to evade them interact in the corporate context indicates that under some circumstances liability evasion may cause a perverse malfunctioning of tort law.

B. *Actors and Incentives*

1. *The Qualified, Responsible Producer*

To analyze how the corporate law's potential for evasion affects the social efficiency model of tort law, it is important first to examine more closely how that model prefers certain producers over others. In other words, absent the potential for evasion, what does tort theory predict about the characteristics of those who are best suited to produce goods that, aside from conferring substantial benefit, also entail substantial risks? As noted above, the social efficiency conception of tort law generally eschews any explicit *ex ante* judgments about the appropriateness of specific products⁷⁹ and levels of production; instead, it relies on

77. See, e.g., Roe, *supra* note 66 (noting absence of widespread resort to evasive behavior). See also *Negative Verdict: Manville's Bid to Evade Avalanche of Lawsuits Proves Disappointing*, Wall St. J., July 15, 1986, at 1, col. 6 (noting adverse consequences of bankruptcy filing).

78. For example, Landes and Posner recognize the existence of limited liability, but characterize it simply as a form of business insurance. *Positive Economic Analysis*, *supra* note 3, at 536. This view, however, overlooks the doctrine's implications for the social efficiency model. To be sure, from the investor's perspective, limited liability functions like insurance by capping losses. But from the producer's perspective (the one that tort law seeks to influence), limited liability differs dramatically from insurance in that it is costless once the liabilities exceed the value of the firm. Thus, if a producer wishes to insure against liabilities that may exceed the value of the firm, it must *pay* for insurance and the product's price therefore will indirectly signal its riskiness. But if limited liability is used as insurance against value-exceeding losses, the costs of such losses remain externalized and are not reflected in the product's price. To this extent, the tort system's capacity to signal risk through price is impaired.

79. To be sure, under negligence, and under the design and marketing prongs of strict liability, courts do purport to make general determinations as to the reasonableness of certain decisions by producers. See note 29 *supra*. Yet, a negligence-based determination that a producer has acted unreasonably in some regard does not, by itself, always force a change in future behavior. Instead, the manufacturer often can "test" the correctness of the unreasonableness determination by incorporating the expected costs of such liability judgments into the product price and letting the market assess whether the product is still reasonably priced. If so, the manufacturer

liability judgments and competition between producers to propel producers toward a socially optimal level of safety for any product. The model further suggests that those producers who reduce accident costs to a socially efficient level will prevail in a competitive market over rivals who spend too much or too little on safety measures.

It is unlikely, however, that a producer triumphs in this competitive process simply by randomly arriving at the proper mix of safety and risk in its production processes. The businesses that tort law seeks to influence vary enormously in size, age, organization, institutional experience, capital structure, management orientation, and myriad other ways, and it is reasonable to assume that some of these characteristics combine to make certain producers more skilled than others in optimizing accident costs.⁸⁰ Consider, for example, two firms that both wish to market a product for which a ready demand exists. Firm *A* is an established concern with substantial experience in developing related products. It has a well-trained, professional and committed management. By virtue of its track record, it enjoys easy access to capital markets and a high level of consumer confidence. Firm *B*, in contrast, is formed solely to meet the demand for the new product. Its management is thin and unseasoned, its borrowing power is more limited, and it has minimal experience to draw upon.

Assume further that the product both firms seek to market can be produced in several forms, all of which will meet the basic consumer demand, but which entail different levels of risk.⁸¹ If all other production costs are held constant, long-term success in the product's market will depend on each firm's ability to identify and market the product in the form that embodies a socially efficient balance between safety and risk. But although both producers are capable of producing the product in its optimal form, Firm *A* will be generally more likely to succeed under such circumstances. Its management, drawing from past experience and anxious to protect the goodwill and consumer confidence it has established, will vigorously seek to identify the safety

may decide to continue behaving "negligently." Thus, despite the fact that negligence determinations purport to be general rulings that the producer should have invested more in safety, the enforcement of these determinations still often rests with the market. See Calabresi, *Optimal Deterrence and Accidents*, *supra* note 3, at 660-61.

80. For explorations of the significant differences in corporate size and functioning, see Conard, *The Corporate Census: A Preliminary Exploration*, 63 CALIF. L. REV. 440 (1975); M. EISENBERG, *THE STRUCTURE OF THE CORPORATION* (1976).

81. Lawnmowers, for example, cut grass; most seem to be equally adept at this simple task. Despite this constant function, there remains a significant potential for variation in the safety of different designs. A manufacturer must decide how explosion-proof to make the engine, how automatic to make the engine shut-off, how shielded to make the blade housing, how disintegration-resistant to make the blade, and so forth.

risks associated with producing the product in its various forms.⁸² Its income from other products, combined with its access to capital markets, will permit it to finance research and development and delay introduction of the product until it answers safety concerns and then selects the most socially efficient product form.

Firm *B*, in contrast, is less likely to undertake or satisfactorily resolve the necessary safety calculus. Its limited experience will make it less sensitive to safety concerns and less adept at solving such problems, and its limited income and borrowing power will deny it the luxury of an extended research and development program. Thus, it is more likely that Firm *B* will fail to identify the optimal product form, and thus suffer a competitive disadvantage.

This model of competition under tort liability rules is obviously very stylized. In reality, individual producers fall all along the spectrum between the extremes identified above, and the importance of individual factors may vary significantly between industries. Nonetheless, the model does illustrate a proposition that seems intuitively correct: the existence of certain organizational attributes such as size, product line diversity, past experience, managerial professionalism, long-range planning, commitment to quality, capital market access, and existing consumer confidence *should* correlate positively with a firm's ability to behave in a socially efficient manner when producing a new, and potentially dangerous, product.⁸³ This proposition thus lends some predictive power to tort theory. Specifically, the analysis suggests that when a product poses significant safety concerns, firms with a significant number of the qualities noted above should dominate the product market because of their enhanced ability to avoid excessive liability costs.

Tort theory's implicit preference for having "qualified" producers dominate the markets for potentially risky products assumes, of course, that such producers will not succumb to the temptations offered by liability-limiting strategies. Fortunately, many of the same factors that make such a firm better qualified to solve the social efficiency calculus correctly also make it likely that such a firm will behave responsibly from tort law's perspective. Consider, for example, the deliberations of the well-established Firm *A* concerning the use of

82. See Huber, *supra* note 43, at 303-04 & n.106.

83. Cf. G. EADS & P. REUTER, *supra* note 7, at 46-51 (discussing relationship between firm attributes and commitment to safety); Roe, *supra* note 66, at 51-55 (noting competitive advantages of multi-product firms); Easterbrook & Fischel, *supra* note 57, at 109-10 (noting that problems causing judicial disregard of limited liability typically occur with small, closely held corporations). Indeed, the factors enhancing a firm's ability to optimize product safety generally enhance a firm's competitiveness in other aspects of its operations as well.

a subsidiary to limit liability that may be generated by the production of a new, potentially risky product. As noted above, the use of such a strategy allows the firm to market the product in an unsafe form and earn high short-term profits by failing to include delayed liability costs in the product's price. To be sure, tort liability will ultimately overwhelm the subsidiary and destroy Firm *A*'s investment, but in the interim it may have made a sufficient return to justify the loss.

Nonetheless, Firm *A*'s planning analysis is unlikely to hinge solely on such a myopic monetary calculus. Instead, Firm *A* will consider the damage that its subsidiary's tort liabilities will have on consumer confidence in and demand for its other products. It will worry about the impact of its subsidiary's bankruptcy on its status with its creditors and its valuation by the equity markets. And even absent such monetary costs, management interest in institutional permanence, personal reputation, and career impact may discourage liability evasion.⁸⁴ Thus, while Firm *A* may use a subsidiary to protect against unforeseen events, it is likely nonetheless to insist that the subsidiary produce and price the product in a socially optimal fashion.

Thus far, the analysis is reassuring: the producers that are most qualified to produce potentially dangerous products also have little incentive to engage in liability-evading behavior. The product market, however, is not populated solely by such qualified, responsible actors. These favored producers instead must often compete with firms that are neither as adept at making socially efficient production decisions nor as concerned about the consequences of evading liability. Such competition, which obviously has significant adverse implications for the social efficiency model, is likely to come from at least two quarters.

2. *The Qualified but Irresponsible Producer*

First, qualified producers may face competition from irresponsible producers within their own ranks. This may seem paradoxical at first, for it has just been noted that the qualities that make a producer well-qualified to undertake risk-producing activities also tend to encourage it to behave responsibly. This alignment of incentives, however, occurs primarily on the institutional level: *as an entity*, a qualified firm typically views liability avoidance as an unacceptable business strategy because of the high costs — in terms of injury to reputation and good-

84. Indeed, managerial professionalism and concern for reputation may, in some cases, prevent managers from engaging in some forms of evasive behavior, such as liquidation of the firm prior to the accumulation of a fatal level of liabilities, even though such actions might clearly be in the best interest of the shareholders. See Roe, *supra* note 66, at 23-25. See also J.K. GALBRAITH, *THE NEW INDUSTRIAL STATE* 176 (1967) (noting tendency of established enterprises to value stability and steady growth over high-risk, high-return strategies).

will, impairment of credit, impact on other product lines, and so forth — that such behavior generates. This general institutional preference against liability avoidance and for socially efficient behavior, however, must be translated to and implemented in the context of numerous, specific decisions surrounding the design, production, and marketing of individual products. Recent scholarship regarding the organizational behavior of large institutions suggests that, during this translation process, the entity's interest in complying with legal norms may be sacrificed by managers within the firm to further their short-term interests.⁸⁵ In such cases, even responsible firms — ones that are institutionally inclined to plan for and pay all their liabilities — may cross the line into socially inefficient behavior.

To observe this negative dynamic, consider once more our prototypical qualified producer, Firm *A*, as it undertakes manufacture of a new, potentially risk-creating product to fill an apparent consumer demand. In a large enterprise, the project will usually be assigned to a specific division or subsidiary of the firm. Although the managers of the project will typically be aware of the firm's general interest in complying fully with liability rules, they may also face other, potentially conflicting criteria for judging their performance.⁸⁶ Specifically, the tendency in many large-scale enterprises for central management to view internal divisions as competitors for the firm's capital allocations and, accordingly, to assess their performance in terms of short-term profitability,⁸⁷ creates pressures on project managers to ignore safety concerns that will not immediately affect profitability.⁸⁸

This short-term managerial focus, unfortunately, dovetails with the significant time delays between product manufacture and accident occurrence that characterize many product risks. Thus, if the new

85. See generally Henderson, *supra* note 6, at 780-83; Coffee, *Beyond the Shut-Eyed Sentry: Toward A Theoretical View of Corporate Misconduct and An Effective Legal Response*, 63 VA. L. REV. 1099, 1131-36 (1977); Kraakman, *Corporate Liability Strategies and the Costs of Legal Controls*, 93 YALE L.J. 857 (1984); Jensen & Meckling, *Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure*, 3 J. FIN. ECON. 305 (1976); Fama, *supra* note 74; C. STONE, *WHERE THE LAW ENDS* (1975).

86. See Coffee, *supra* note 73, at 398-99.

87. See Henderson, *supra* note 6, at 781-82; Coffee, *supra* note 73, at 393, 397; W. KLEIN & J. COFFEE, *BUSINESS ORGANIZATION AND FINANCE* 159 (2d ed. 1986); O. WILLIAMSON, *MARKETS AND HIERARCHIES* 132-37 (1975); R. CYERT & J. MARCH, *A BEHAVIORAL THEORY OF THE FIRM* 119 (1963).

88. Indeed, as Professor Coffee notes, such misbehavior constitutes a type of "benevolent misconduct" that arises not from a direct conflict between the interests of the managers and the shareholders, but at least potentially from variations in the time frame for assessing profitability. Coffee, *supra* note 85, at 1105 & n.13. See also Coffee, *supra* note 73, at 394 ("Necessarily, the manager acts within a shorter time frame than the firm (if only because in the long run, the manager, unlike his firm, will be dead), and thus may focus more on short-run profit maximization.").

project entails some remote risks — ones that will occur, if at all, only years in the future — project managers have strong incentives to ignore or minimize such safety concerns. The alternative, addressing such concerns through further research and testing, inevitably entails costs and delays that will reduce short-term profitability.⁸⁹ Moreover, the ethos of management may not reward such caution, but instead misconstrue it as ineptitude, mismanagement, or lack of initiative.⁹⁰ Thus, faced with competition both inside and outside the firm, and torn between institutional directives to move both aggressively and cautiously, project managers may simply gamble that the remote safety concerns will not occur,⁹¹ or will occur long after their association with the project is over and forgotten.⁹²

Of course, such counterefficient behavior is not inevitable. Upper-level management can develop and implement monitoring systems to insure that project managers keep long-term institutional interests as well as short-term profitability in mind when assessing safety issues.⁹³ Alternatively, the firm can seek to bond or insure against the ultimate costs of such managerial shortcomings.⁹⁴ Finally, the “market” for managerial talent may, to some extent, penalize a manager for past deeds that proved to be counterefficient in the long run.⁹⁵ Yet, despite these constraints,⁹⁶ the pressure on managers in a competitive environ-

89. See G. EADS & P. REUTER, *supra* note 7, at 61 (“[T]he product development process drains the firm’s earnings. . . . [T]here is likely to be resistance to taking the time and resources required first to surface subtle or complex hazards and then to redesign and retest to assure that they have been properly dealt with.”).

90. See Coffee, *supra* note 85, at 1135-36; O. WILLIAMSON, *CORPORATE CONTROL AND BUSINESS BEHAVIOR* 51-52 (1970).

91. Cf. Coffee, *supra* note 73, at 395 (discussing empirical evidence indicating that managers may ignore strong indications of unacceptable risks or illegality when deciding to produce potentially unsafe products).

92. For a general discussion of the problem of “sub-goal pursuit,” in which middle-level managers confronted with inconsistent policy directives tend to sacrifice long-term institutional goals to further the short-term interests of the particular project, see Coffee, *supra* note 85, at 1135-36.

93. See, e.g., Coffee, *supra* note 85, at 1147-56 (proposing “mini-boards” of directors located at the mid-level of the corporate structure to enhance monitoring of counterefficient behavior).

94. See generally Fama & Jensen, *Agency Problems and Residual Claims*, 26 J. LAW & ECON. 327 (1983). While insuring against managerial misbehavior may serve the compensatory function of tort, it probably does little to encourage socially efficient behavior. In order to signal consumers correctly as to the risk potential of a product, the costs of insurance would have to be incorporated into the specific products that would be produced in a sub-optimal form by the shirking project management. But because, by definition, central management does not know in advance when or where such behavior will occur, it is hard to see how the costs of insuring against it can be correctly tied to the relevant products.

95. See generally Fama, *supra* note 74, at 296-98; Levmore, *Monitors and Freeriders in Commercial and Corporate Settings*, 92 YALE L.J. 49, 60-61 (1982).

96. Most scholarship in this area reflects some pessimism about the efficacy of such corrective devices. See, e.g., Henderson, *supra* note 6, at 770-80; Jensen & Meckling, *supra* note 85, at 308; Levmore, *supra* note 95, at 60-61.

ment to maximize short-term profits can be significant. Thus, at the very least, the theory of the firm suggests that, even in markets populated solely by potentially responsible firms, socially efficient behavior is not inevitable.

3. *The Unqualified, Irresponsible Producer*

Finally, the qualified, responsible producer must compete against firms less endowed with the attributes of size, wealth, expertise, capital market access, consumer good will, and so forth. While, as noted, the absence of these attributes makes it less likely that a firm will be *capable* of marketing its product in a socially efficient form, it also makes the firm more immune to the collateral costs of liability evasion.⁹⁷ It is small, with few assets to protect. It may have no other products or consumer goodwill to guard. As a fledgling concern, its access to capital is already limited. If its stock is not publicly traded, it is free from the disciplinary effect of the equity markets. In sum, it is less likely to have the same degree of institutional interest in permanence and reputation as does a qualified, responsible producer. Thus, its decisions concerning liability evasion behavior are likely to rest more singularly on a narrow, cold determination of whether it will be more profitable to underinvest in safety and ultimately liquidate, or to spend enough on safety to avoid a fatal accumulation of tort liability. While the direction such a decision takes will obviously vary with the specific characteristics of the firm and the nature of the product, an unqualified firm is, on the whole, more likely than a qualified one to take the money and run.

C. *Product Markets and Sub-Optimal Behavior*

Thus, when the differences among producers and the incentives for evasion are introduced into the social efficiency model of tort, some disturbing predictions follow. The very characteristics that make a producer most likely to produce a product with a socially optimum level of safety are also likely to discourage that producer from engaging in evasive behavior. Such a result, standing alone, is to be applauded, but it becomes troubling when such responsible producers must compete against others who are both less competent to address safety concerns and more willing to engage in evasive behavior. In such an event, the very competition that the social efficiency model of tort seeks to harness may penalize precisely those actors tort law pur-

97. See text at notes 72-76 *supra*.

ports to reward.⁹⁸ As outlined below, the degree to which responsible producers face this type of unfair competition from evasion-prone producers depends heavily on the nature of the particular product market.

1. *Restricted Markets*

In some cases, the nature of the product will make it unlikely that firms prone to evasive behavior will be able to enter the market. Specifically, when producing the product in *any* form requires significant technical expertise, long-range planning, extensive financing requirements, and a high degree of management competence, “fly-by-night” businesses will effectively be barred from the market. Correspondingly, firms that are able to enter such markets, by virtue of possessing such qualities, are unlikely to be *institutionally* predisposed towards engaging in liability evasion.⁹⁹ Thus, for example, the automobile industry is highly unlikely to provide examples of institutionally sanctioned evasive behavior.¹⁰⁰

Similarly, complex regulatory regimes may effectively bar the entry of producers who are prone to evasion. By establishing costly requirements for design, testing, and marketing, such regimes effectively specify a minimum level of safety and limit production by unqualified actors. Complying with the drug registration process administered by the Food and Drug Administration, for instance, is only possible for firms with extensive experience in the drug market, sufficient resources to finance extensive research and development, and a management committed to permanence and long-range planning.

Thus, if tort law can produce a socially efficient level of product safety, it is most likely to do so in such restricted product markets. Yet, such a result is by no means certain. Such markets, although dominated by qualified, responsible producers, may also be intensely competitive. As noted, such competitive pressures may force managers within the firm to subvert long-term interests in responsible behavior in order to obtain the short-term benefits of liability evasion.

98. Cf. Huber, *supra* note 43, at 291-92 (emphasis in original):

Rigid risk internalization will promote safety only when all sources of risk within a particular risk ‘market’ can be held to the regulatory ideal. But if most sources of risk cannot be deterred by regulation, it may well be counter-productive to attack external risks from the remaining sources. Patchy, erratic risk internalization may impose *greater* costs on the *safer* substitutes within particular markets, and so may encourage a shift in consumption toward the more hazardous.

99. As discussed above, however, internal organizational pressures may in some cases cause such firms to cross over into socially inefficient behavior. See text at notes 85-96 *supra*.

100. The common practice of automobile manufacturers to vigorously oppose products liability claims does not contradict this assertion. Such efforts are not aimed at evading lawfully imposed liabilities, but instead simply seek to keep such costs — like other production costs — to a minimum. See note 55 *supra*.

Alternatively, the onset of business reversals, unforeseen liabilities, and other economic ills can erode the economic strength of a firm, and, if such problems become sufficiently severe, force the firm to reconsider the attractiveness of liability evasion. The Chapter 11 filings of major corporations such as Johns Manville, A.H. Robins, and LTV reflect this dynamic at least in part.

When responsible firms engage in liability avoidance, the overall social efficiency of even restricted markets may be impaired. Such conduct increases the competitive pressures on the remaining producers by forcing them to compete with producers that no longer necessarily incorporate full liability costs in their product prices.¹⁰¹ Moreover, the decision of a single major actor in the market to engage in liability avoidance may decrease the stigma associated with such conduct, and thus lessen the institutional inhibitions that restrain other competitors from behaving similarly.¹⁰² In sum, then, the social efficiency model of tort may not always be viable even under favorable conditions.

2. *Unrestricted Markets*

Although some markets are restricted to "qualified" producers, many products can be manufactured by firms largely lacking such attributes. For example, a power lawnmower, a ladder, a lighting fixture, or a child's toy all entail distinct safety risks, yet all can be produced without significant expertise or capital investment. Manufacturers of such products, including those prone to liability evasion, face few bars to entry into the marketplace.¹⁰³ Instead, tort law relies on the eventual onset of a fatal level of liability to eliminate irresponsible firms from the market. Yet, for several reasons, this self-cleansing

101. For example, when LTV Corp., the nation's second largest steel producer, filed for reorganization under Chapter 11 of the bankruptcy code, many other steel producers expressed the concern that they might be forced to follow suit in order to remain competitive with LTV. See *LTV Chapter 11 Filing Will Change the Way Steel Mills Compete: Firm's Likely Edge in Labor and Other Costs Raises Fear of Domino Effect*, Wall St. J., July 18, 1986, at 1, col. 6.

102. For example, the decision in August 1982 of Johns-Manville Corporation, a major and financially solvent manufacturer, to file for bankruptcy reorganization in an effort to limit its asbestos-related liability dramatically altered the way most businesses perceived bankruptcy. Prior to Manville's filing, bankruptcy was generally equated with insolvency. See *Andresky, An Honorable Escape?*, FORBES, Oct. 7, 1985, at 108. Its action, however, eased the stigma associated with bankruptcy, and thus paved the way for other major and still solvent companies such as A.H. Robins and LTV to seek Chapter 11 protection.

103. To be sure, corporate codes sometimes impose capitalization and insurance requirements on new enterprises. In practice, however, these requirements tend to be so minimal that they pose no meaningful bar to market entry and provide no real protection for tort claimants. See, e.g., *Walkovszky v. Carlton*, 18 N.Y.2d 414, 223 N.E.2d 6, 270 N.Y.S.2d 636 (1966). See generally Hackney & Benson, *Shareholder Liability for Inadequate Capital*, 43 U. PITT. L. REV. 837 (1982); Landers, *supra* note 65, at 591-93.

function of tort law is probably insufficient to protect responsible producers in unrestricted markets from unfair competition by liability-evading producers.

First, the tort process is slow to identify and penalize bad actors. A defective product may not cause injuries or the injuries may not manifest themselves for significant periods of time. Moreover, years can be consumed in litigation before claims are reduced to judgments and those judgments are satisfied. Only after such judgments have mounted to an unmanageable level will a firm be eliminated from the market. Until such time, however, it will have been able, by underinvesting in safety, to sell its product at a lower price than that charged by its responsible competitor.

Moreover, even if the tort system were streamlined to hasten the winnowing process, the absence of barriers to entry into the market allows new, potentially irresponsible firms to quickly replace those that the tort system has succeeded in eliminating. Under such circumstances, the responsible producer faces a constantly changing array of competitors, none of which plays by the rules, but all of which in the short run can outcompete the responsible producer by underinvesting in safety. Thus, while evasive behavior is generally self-destructive for each individual actor, it can nonetheless become a permanent feature of an unrestricted product market.

Of course, the responsible producer can always attempt to combat this problem by highlighting its willingness to honor all claims and denouncing its competition's propensity to evade liability. Yet here, the social efficiency model itself suggests limits on the responsible producer's efforts to educate consumers about the issue of liability evasion. The model starts from the assumption that consumers are poorly informed about product safety, and thus relies on tort liability as a means of indirectly correcting this deficiency. It is unlikely, however, that consumers are any more capable of absorbing and acting on information concerning the relative likelihood of liability evasion by different producers than they are with respect to safety issues. Both types of information — relative product safety and relative propensity for evasion — bear directly on the risks imposed on the consumer, and an informational deficiency in one area is likely to be mirrored by a deficiency in the other.¹⁰⁴ Thus, an effort by responsible producers to edu-

104. Indeed, consumers may be relatively better informed on product safety than on the propensity of various producers to evade liability. First, publications such as *Consumer Reports* do provide some information directly to consumers on product safety issues, while information on the propensity of firms to evade liability is likely to be found, if at all, in the speculative pages of the financial press. Moreover, consumers may over time develop some sophistication about the dangers inherent in certain products or in the products of certain manufacturers. But liabil-

cate consumers on the issue of liability evasion is unlikely to correct the market distortion caused by the behavior of irresponsible firms.

Indeed, the predicted failure of tort rules to police unrestricted product markets adequately is born out with respect to all four product examples — lawnmowers, ladders, lighting fixtures, and toys — noted above. In each case, extensive direct or indirect regulatory systems have been imposed on product manufacturers. Such regulations mandate acceptable levels of safety and, in so doing, create barriers to the easy entry into such markets by unqualified, irresponsible actors. This legislative conversion of unrestricted markets to restricted ones again suggests — contrary to the social efficiency model — that competition alone may fail to drive the product market toward an optimal level of safety.¹⁰⁵

3. *Turbulent Markets*

Finally, it is useful to consider competition between producers in markets plagued by substantial uncertainty, referred to here as turbulent markets. As suggested earlier, responsible producers typically react to uncertainty by reserving funds or purchasing insurance to cover all future liabilities, for failure to do so may imperil the company. This task presents no real challenge when risks and liability rules are reasonably predictable, but proves far more difficult in the face of unforeseeable risks and changing liability rules. In such cases, the self-insuring producer has few good options. It can *guess* that liabilities may be worse than the then-available information suggests, and attempt to reserve an extra amount to cover such a contingency.¹⁰⁶ Or, if the uncertainty over risk or future liability rules becomes too uncomfortable, the manufacturer may simply decline to market the product.

Finally, a producer in a turbulent market may seek commercial insurance. As noted above, however, this tactic hardly provides a universal salve for uncertainty-based problems. Instead, commercial product liability insurers will respond to such uncertainties in much the same fashion as a self-insuring producer. Since their profitability as insurers depends on setting a premium that exceeds actual losses,

ity evasion, because it eliminates the actor from the market, may prevent development of a similar sort of consumer data base.

105. Of course, one might question the extent to which such regulatory regimes themselves reflect a socially efficient level of safety. For our purposes, however, it is sufficient to note that legislative dissatisfaction with the level of safety observed in certain markets is, at the very least, strong evidence that such markets are not generating adequate levels of safety.

106. See Danzon, *supra* note 6, at 573 (noting practice by manufacturers of overinsuring in the face of legal instability).

insurers are likely to significantly increase premium charges in the face of uncertainties in order to establish an ample cushion. Or insurers may seek simply to withdraw coverage from particularly volatile product areas.

During the recent tort "crisis," both producers and insurers behaved in the ways discussed above,¹⁰⁷ and the available evidence suggests that uncertainties over risks and liability rules were a significant cause of such behavior.¹⁰⁸ While such responses may decrease the likelihood that producers and their insurers will be caught short by unforeseen risks or unanticipated changes in tort law, they are not necessarily consistent with the social efficiency model of tort. Consider, for example, a manufacturer that reserves a significant amount of revenue to cover unforeseen liabilities, or an insurer that sharply increases premium charges for the same reason. Such a strategy *might*, in hindsight, turn out to be advantageous, but it nonetheless is based only on a hunch, rather than on the careful attention to market incentives envisioned by the social efficiency model of tort law. And given the uncertainty, it is equally plausible that the amount reserved will turn out to be too little or too much, and thus result in pricing or production decisions that are plainly inefficient in retrospect. In such cases, the model's promise of *ex ante* efficiency holds little substance.

Similarly, the abandonment by manufacturers of certain product lines, or the corresponding refusal of insurers to provide coverage in such areas, might at first glance suggest that the tort system is working to eliminate excessively risky products from the market. Yet the social efficiency model mandates such a drastic measure only if the product, in any conceivable form, causes more harm than good.¹⁰⁹ But the recent wholesale exodus of manufacturers and insurers from certain product areas hardly suggests any careful determination that such

107. See, e.g., Lewin, *The Liability Insurance Spiral*, N.Y. Times, Mar. 8, 1986, at 35, col. 3 (describing dramatic premium rise and withdrawal of insurance for certain activities); Madden, *Liability Insurance Cost is Soaring for Localities*, N.Y. Times, Sept. 30, 1985, at B1, col. 5 (same); Tarnoff, *Pool Slide Firm Files Bankruptcy To Handle Product Liability Claims*, 19 BUS. INS. 2 (1985) (insurers withdraw coverage for nation's largest diving board and pool slide manufacturer; company resorts to Chapter 11 to contain liability). See generally Priest, *supra* note 48.

108. See generally Danzon, *supra* note 39, at 534-43; Priest, *supra* note 48. For example, Merrill Dow Pharmaceuticals abruptly withdrew the morning sickness drug Bendectin from the market in 1983 when it became uninsurable because of liability concerns. The withdrawal occurred despite FDA studies that failed to establish a need to withdraw the drug. Epstein, *supra* note 47, at 648 & n.10. Similarly, in January 1986, G.D. Searle & Co. withdrew its IUDs, considered the safest on the market, when concerns over A.H. Robins Co.'s Dalkon Shield liabilities caused insurers to withdraw Searle's coverage. Brody, *When Products Turn into Liabilities*, FORTUNE, Mar. 3, 1986, at 20.

109. Thus, for example, even abandonment of a very dangerous product would be inappropriate if it nonetheless had a high social utility and adequate substitutes were not available.

products have no social utility whatsoever.¹¹⁰ The discontinuation of vaccine production by many drug concerns provides an example.¹¹¹ Similarly, football helmets unquestionably have a positive social value, yet almost all sports manufacturers have abandoned their production in the face of liability concerns.¹¹² In such cases, then, uncertainty causes society to lose beneficial products because responsible manufacturers and their insurers, unwilling to gamble institutional permanence or profitability, head for the sidelines.¹¹³

The debilitating effect of such uncertainty is particularly likely to be pronounced in unrestricted markets where both responsible and evasion-prone producers compete. Consider again, for example, the behavior of Firm *A* and Firm *B* when marketing a new, identical product during a period when liability rules appear volatile. Suppose further that traditional research reveals risks that translate, under then existing liability rules, into an average accident cost of \$4 per unit. If other production costs equal \$2 per unit, the product will be profitable if it is marketed at more than \$6 per unit. Yet Firm *A*, concerned about additional liabilities that may spring from unforeseen risks or changes in liability rules, may expend further time and resources to search for unforeseen risks,¹¹⁴ or it may seek additional insurance or reserve additional funds to cover unforeseen liabilities, or it may — if the uncertainty is too great — simply decline to market the product. In any event, the price of the product, if it is produced at all, will

110. See Priest, *supra* note 48, at 1527 (Recent "drastic changes in insurance coverage occurred despite any evidence of increases in the underlying riskiness of the products or services affected by the crisis.").

111. See Brody, *supra* note 108, at 22 (describing exodus from market of most manufacturers of seven pediatric vaccines required for children entering school). See also Kitch, *Vaccines and Product Liability: A Case of Contagious Litigation*, 9 REGULATION 11 (1985). The swine flu fiasco provides another dramatic illustration. Although Congress appropriated sufficient funds to inoculate all United States residents, drug manufacturers — unable to obtain insurance — refused to market swine flu vaccines without a grant of statutory immunity from tort liability. National Swine Flu Immunization Program of 1976, Pub. L. No. 94-380, 90 Stat. 1113 (1976). Thus, despite an unequivocal consensus concerning its value, the swine flu vaccine would not have been produced absent legislative intervention disenfranchising the tort system.

112. See *Liability Penalties Drive Scared Wilson Out of Helmet Game*, 13 BUS. INS. 1 (Sept. 17, 1979) (discussing decisions of major sports manufacturers to abandon helmet production because of risk of high liability judgments).

113. See, e.g., Berkowitz, *Canada Attracts U.S. Women Seeking IUDs*, Wall St. J., Sept. 11, 1986, at 33, col. 3 (noting trend of U.S. women to obtain IUDs in Canada after major U.S. manufacturer abandoned market in face of liability concerns). See generally Priest, *supra* note 48, at 1563 (suggesting that because sociolegal uncertainty has been skewed in the direction of increasing risk of liability, insurance function has been impaired).

114. However, as previously noted, a rational firm in a competitive environment will typically terminate its research into potential product risks somewhere short of perfect knowledge. See note 39 *supra* and accompanying text. See generally Schwartz, *supra* note 39.

probably rise above the \$6 minimum dictated by known accident and production costs.

Firm *B*, in contrast, is unlikely to react to such uncertainties. As previously noted, it is already prone, because it lacks the institutional attributes of a qualified producer, to evade the \$4 in *known* accident costs if doing so increases short-run profits. It is hardly likely to expend funds on additional research or to insure itself against unforeseen liabilities. Correspondingly, because it focuses more on short-run profitability than on long-run survival, it is less likely to decline altogether to market the product.

In sum, risk uncertainty and doctrinal instability — aside from directly impairing efficiency — exacerbate the problems caused by evasive behavior. Under such conditions, qualified, responsible firms tend to regard known accident cost projections as possibly inadequate, and therefore behave in a conservative manner that makes their products even more costly and noncompetitive. In extreme cases, such producers may abandon the market altogether, leaving evasion-prone firms that are largely indifferent to such contingent concerns to flourish in the vacuum. Ironically, in this worst case setting, evasion-prone manufacturers begin to play what might loosely be characterized as a socially useful role. Because of their relative indifference to problems of uncertainty, they may continue to produce socially useful products following the retreat of responsible producers. To be sure, such products are unlikely to embody a socially optimal measure of risk — for the competitive mechanism generating such optimality has been suspended — but they may still be better, in the social efficiency sense, than no products at all.

III. THE PROSPECTS FOR REFORM

Thus far, this article has taken the social efficiency justification of tort law on its own terms — as a theoretical, empirically unverified, and perhaps unverifiable model — and shown how problems of rule definition, uncertainty, and liability evasion call into question the model's predictions regarding the ability of tort rules and competitive product markets to generate socially optimal levels of safety. At this juncture, most law review writing reflexively switches from the critical to the prescriptive. The shortfalls of existing dogma have been identified; now, remedies are proposed, agendas are established, crusades are announced.¹¹⁵ Not surprisingly, then, this article's critical thesis —

115. This ritual of criticism followed by reconstruction has been noted elsewhere. See Henderson, *supra* note 6, at 765.

that tort law may in fact *not* be socially efficient — generates an impulse, a desire, to prescribe corrections for this deficiency.

Indeed, such rallying calls have long been heard from tort reformers. To be sure, they reject the suggestion of the social efficiency model that tort rules generate optimal levels of product safety. But such reformers, by and large, share the model's implicit normative premise. Their language may differ; they may speak of deterrence and responsible corporate behavior rather than equilibriums. But their underlying vision — that of a tort system that guides producers toward optimal behavior — is the same one that bewitches proponents of the social efficiency model. In short, while such reformers dispute that tort law is efficient, they agree that it ought to be. And to this end, they propose reforms of many stripes and colors, and clamor for recruits.

In my view, enlisting unhesitatingly in any such campaign is a mistake. This is not to suggest that tort law, in its present configuration, is anywhere near ideal. Indeed, in some ways, the current operation of the tort system — as a real world phenomenon and not an abstract model — seems so inefficient and flawed that almost any change would be an improvement. Rather, I wish to suggest that while tort law may be improved in a relative, incremental sense, it is probably neither possible nor wise to devise changes sufficient to produce the social efficiency sought after by tort reformers.

A. *The Possibility of Reform*

This skepticism regarding reform flows from several sources. First, comprehensive reform may be very difficult to achieve, particularly if such reform is attempted through the tort system itself. The impediments to social efficiency discussed above are far more impregnable than the citadels previously stormed by tort reform. The doctrine of privity, for example, was in the end merely a legal construct, and thus subject to judicial and legislative abrogation. The problems of rule specificity, uncertainty, and evasion are, in contrast, far more endemic to a system of regulation based on after-the-fact imposition of liability.¹¹⁶

As an illustration, it is useful to consider successor liability, the area in which tort courts and theorists have been most active recently in attempting to control evasive behavior. Essentially, the problem arises when a product manufacturer sells its productive assets and dis-

116. See Schwartz, *supra* note 39, at 718-19 (firms cannot determine efficient behavior if liable for remote risk).

solves before all of its potential tort liabilities have accrued and been satisfied. Because the formal corporate process of dissolution ignores contingent future liabilities,¹¹⁷ tort plaintiffs that are injured after the manufacturer has exited the market are generally left without easy recourse.

Such a result obviously conflicts with the social efficiency model of tort law, and hence has spurred tort theorists to call for reform through expansion of liability rules.¹¹⁸ The problem lies with the direction such an expansion should take. The obvious villain — the manufacturing corporation — no longer exists. The post-dissolution plaintiff can sue the former owners of the defunct corporation,¹¹⁹ but enormous practical problems exist. These shareholders may be numerous, dispersed, and hard to identify. Worse yet, because of the doctrine of limited liability, the most the plaintiff can recover from any shareholder is the amount the shareholder received upon dissolution of the corporation — an amount which in the context of a failed corporation may well be minuscule.¹²⁰

Such practical barriers effectively shield the owners of the harm-causing producer from liability, and thus plaintiffs in such cases have naturally looked to the successor corporation — the purchaser of the tortfeasor's assets — for satisfaction. Yet when they did so, their efforts were foiled by well-established rules of corporate law that provided that, absent special circumstances, a purchaser of assets did not acquire the unrealized, contingent liabilities of the seller.¹²¹ In response to this limitation, several courts have recently fashioned “successor liability rules” which impose liability on the successor corporation for injuries caused by the predecessor's defective products.

117. Henn & Alexander, *supra* note 66, at 898-915. Indeed, most state corporation statutes terminate claims arising *prior* to dissolution if not asserted within two years of dissolution. *Id.* at 898-99. Despite the harshness of such limitations from the tort perspective, they serve the goals of predictability and certainty favored by business planners. *Id.* at 911.

118. See, e.g., Hyman, *The Liability of Successor Corporations for Defective Products of a Predecessor Corporation — A Switch from Corporate to Tort Law*, 10 S.U. L. REV. 165, 203 (1984) (corporate law's restraints on successor liability represent “Dark Ages” and are “inappropriate and irrelevant to modern times”; praises “enlightened courts” that have disregarded corporate rules and “realized that products liability cases should be decided on a products liability law basis”).

119. Such a suit would be based on the theory that shareholders, in receiving their liquidation distributions, hold such moneys in trust for the benefit of future claimants against the dissolved corporation. See Henn & Alexander, *supra* note 66, at 909.

120. See generally Green, *Successor Liability: The Superiority of Statutory Reform to Protect Products Liability Claimants*, 72 CORNELL L. REV. 17, 49 (1986).

121. These rules impose tort liability on the successor only if the assets were transferred through a formal or de facto merger or consolidation, if such liabilities were contractually assumed, or if the transaction was marred by certain types of fraud. See Green, *supra* note 120, at 22-24; Henn & Alexander, *supra* note 66, at 888-96.

The details of these judicially fashioned successor liability rules need not detain us here;¹²² rather, what is important to note is the limited impact such rules have on the problem of liability evasion. The tort rules do nothing to address directly the conduct of the actual liability evader — the exiting predecessor. Instead, they seek to control that conduct indirectly by imposing accident costs on the successor corporation in the hope that the successor, faced with the additional liability costs, will demand appropriate price concessions from the predecessor.¹²³ If such negotiation does occur, the problem of evasion is diminished: the tortfeasor may leave the market, but not before providing the means to cover its unrealized liabilities.¹²⁴

In reality, however, the new successor liability rules probably do little to restrain the ability of exiting tortfeasors to limit their liability. This is because these new rules themselves are easily subject to evasion. They are nonglobal in nature — imposing liability on the successor only when it has purchased substantially all the assets and goodwill of the predecessor, retained some or all of its employees, and continued its product lines.¹²⁵ Of course, in the absence of liability concerns, this may be the way both the seller and buyer prefer to structure the sale of the predecessor's business. But when doing so triggers the successor liability rules, and when such liabilities may be substantial, both parties may agree to a less efficient transaction in order to avoid transfer of the predecessor's unrealized tort liabilities.¹²⁶ Thus, for example, the predecessor may forego selling, and the successor may refuse to buy, the predecessor's goodwill, despite its value, if the potential liability costs to be avoided are even greater.

To be sure, the new judicial handiwork regarding successor liability may have its intended deterrent impact in some cases, but only

122. Somewhat simplified, the expanded rules permit imposition of liability on the successor if it substantially continues the product line of the predecessor and purchases substantially all of its assets. See generally Green, *supra* note 120; Roe, *Mergers, Acquisitions, and Tort: A Comment on the Problem of Successor Corporation Liability*, 70 VA. L. REV. 1559 (1984); Phillips, *Product Line Continuity and Successor Corporation Liability*, 58 N.Y.U. L. REV. 906 (1983).

123. See, e.g., *Ramirez v. Amsted Indus.*, 86 N.J. 332, 353-54, 431 A.2d 811, 822 (1981) (“[T]he true worth of a predecessor corporation must reflect the potential liability that the shareholders have escaped through the sale of their corporation. Thus, a reduction of the sale price by an amount calculated to compensate the successor corporation for the potential liability it has assumed is [appropriate].”).

124. See R. GILSON, *THE LAW AND FINANCE OF CORPORATE ACQUISITIONS* 1125 (1986).

125. See, e.g., *Cyr v. B. Offen & Co.*, 501 F.2d 1145 (1st Cir. 1974); *Ray v. Alad Corp.*, 19 Cal. 3d 22, 560 P.2d 3, 136 Cal. Rptr. 574 (1977).

126. See Roe, *supra* note 66, at 31-32:

[To avoid the new successor liability rules,] the seller usually must shatter some of its own operational going concern value The factories that made the offending product might have to be dismantled and sold off piece by piece, machine by machine; the sales force might have to be cut back; and trademarks might have to be destroyed.

those in which the economic benefits of engaging in the sort of asset transfers covered by the tort rules outweigh the projected costs of assuming the predecessor's tort liabilities. These situations are likely to be ones where the risks of tort liability from the predecessor's products are small and predictable. But where such products may cause massive or unpredictable injury — a situation which should be of primary concern to courts in fashioning tort rules — the nonglobal nature of the new rules easily allows the careful corporate planner to protect a successor corporation from tort liability for the predecessor's products.¹²⁷ In such cases, tort law's effort to control the predecessor's behavior, through imposition of liability on the successor, is defeated.

The classic response of tort theorists to such dilemmas has been to advocate further expansion of tort rules.¹²⁸ Yet for the reasons just noted, such efforts are of limited utility. An incremental expansion of successor liability rules may capture more transactions, but corporate planners will continue to design asset transfers to circumvent the expanded rules when potential liability costs make compliance unprofitable. And even a global rule¹²⁹ — one that held any purchaser of any asset of a exiting producer liable for all that producer's unrealized torts — would not necessarily prevent liability evasion. Instead, in cases where potential liabilities exceed the value of the predecessor's assets, no transfer will take place: the tortfeasor will simply abandon the tainted assets and exit the market. This result, in which liabilities are evaded *and* productive assets are wasted,¹³⁰ is hardly socially efficient, yet it is likely to plague efforts to control evasive behavior in the

127. Indeed, the reform impulse of tort law, just as in other areas of law, generates its own inevitable counterresponse in the form of practitioner-oriented articles that dispassionately discuss means of evading the new rules. See, e.g., Kadens, *Practitioner's Guide to Treatment of Seller's Products Liabilities in Assets Acquisitions*, 10 U. TOL. L. REV. 1 (1978); Heitland, *Survival of Products Liability Claims in Assets Acquisitions*, 34 BUS. LAW. 489 (1979); Winthrop, *Structuring a Corporate Acquisition to Avoid the De Facto Merger Doctrine*, 6 SEC. REG. L.J. 195 (1978); Yamin, *The Achilles Heel of the Takeover: The Nature and Scope of Successor Corporation Products Liability in Asset Acquisitions*, 7 HARV. J.L. & PUB. POLY. 185 (1984); Shecter, *Acquiring Corporate Assets Without Successor Liability: Is It A Myth?*, 1986 COLUM. BUS. L. REV. 137. See also R. GILSON, *supra* note 124, at 1131-33.

128. See, e.g., Schwartz, *supra* note 39, at 717 (proposing expansion of successor liability rules to hold successor liable for all knowable risks, whether or not successor continues predecessor's product line). See generally Prosser, *supra* note 27 (classic example of the crusade impulse common to tort theorists).

129. In practice, of course, such global rules may be impossible to formulate. Not only do they suffer from the fundamental problems of rule specification discussed earlier, see text at notes 31-36 *supra*, but they may also be undercut by partial immunization of the actor's conduct by other bodies of law, by the actor's ability to operate beyond the territorial reach of the rule, and so on.

130. See Roe, *supra* note 122, at 1561 (New successor liability rules may result in "stymied business transfers, with assets caged in the hands of a demoralized and disabled management that is unable to sell its operations to a higher-valuing and perhaps more capable user.").

successor liability context.¹³¹

Nor is this defect in the reform impulse limited to the successor liability context. The other major area of evasive behavior now subject to reform efforts — the use of subsidiaries to cabin liability — presents parallel problems. A number of commentators have argued persuasively that the concerns underlying the general doctrine of limited liability do not justify the use of wholly owned subsidiaries to limit a parent corporation's liability. Accordingly, they have suggested that tort creditors should readily be able to pierce the corporate veil of a wholly owned subsidiary in order to reach the assets of the parent in the event that tort liability overwhelms the subsidiary.¹³²

However, adoption by courts of such a veil-piercing rule will not redress the problem entirely. Some corporations, whose operations generate manageable and predictable levels of risk, may accede to such a reform and abandon their use of subsidiaries, at least for purposes of liability containment. More risky enterprises, however, may continue to use subsidiaries, while attempting to defeat the expanded veil-piercing rules by sharing ownership of the subsidiary with individual shareholders, thereby creating a non-wholly owned subsidiary.¹³³ As with the successor liability problem, use of these new subsidiaries would, from the parent's perspective, be less efficient than wholly owned subsidiaries,¹³⁴ but possibly worthwhile in light of the liability thereby avoided.

Tort courts, of course, could join the chase by expanding rules to cover partially owned subsidiaries, but such a change would probably require the court to pierce the veil as to the noncorporate shareholders as well — a step most courts would be reluctant to take.¹³⁵ And even if such a bold rule were adopted, corporate planners might simply

131. In this sense, many tort reform efforts create the sort of problems generally addressed under the theory of the second best. *See, e.g.,* Henderson, *supra* note 14, at 1059-65; Rizzo, *supra* note 6, at 652-53. Thus, in the successor liability context, the best solution — forcing all predecessors to pay their liabilities before exiting — is unattainable. The apparent "second best" solution — holding all successors liable — may in practice turn out to be less efficient than more limited rules if it encourages excessive levels of asset abandonment.

132. *See, e.g.,* Blumberg, *supra* note 65, at 611-22; Schwartz, *supra* note 39, at 717; Easterbrook & Fischel, *supra* note 57, at 110-11; Landers, *supra* note 65, at 619 ("If limited liability were being considered for the first time, a strong argument could be made that it should not be extended to the corporate parent vis-à-vis its subsidiary.").

133. *See* Roe, *supra* note 66, at 49.

134. For example, sharing ownership of a subsidiary may preclude the parent from filing a consolidated tax return and deducting losses generated by the subsidiary. Similarly, it may weaken the parent's control over the actions of the subsidiary, because the subsidiary's directors will owe fiduciary obligations to the nonparent shareholders.

135. *See* Hackney & Benson, *supra* note 103, at 873 (noting greater willingness of courts to disregard corporate form to reach assets of parent corporation, as opposed to reaching assets of individual shareholders).

move to the more inefficient, but nonetheless effective, strategy of having risky goods produced under contract or license.¹³⁶ Thus, as with successor liability, incremental judicial reforms are likely to be both of limited effectiveness and capable of generating serious, collateral inefficiencies.

In sum, tort reform holds limited potential for correcting the problems caused by evasive behavior. New rules generate new evasions. And although compliance may increase marginally with each expansion of liability rules, such improvements are likely to be offset, at least in part, by the decreased efficiency of transactions designed to avoid the new rules. Moreover, even with global rules, tort's basic mechanism for controlling conduct — the threat of future liability — is inherently limited. The effectiveness of such a final threat ultimately depends on whether the actor has something to lose. But tort law is powerless to guarantee that actors will want to, or be able to, stay in business. Put more crudely, the law is powerless to ensure that all actors make enough money so that they are concerned about the prospect of losing it through liability judgments.¹³⁷ Thus, even if tort law could proscribe all lesser evasions, it can do little to alter the conduct of enterprises entering the final, natural refuge of insolvency.¹³⁸

Despite the best efforts of tort courts, then, some residuum of vagueness, uncertainty, and evasion will remain. This residuum poses fundamental problems for the social efficiency model of tort. The model relies on competition, and predicts that a responsible producer's attention to liability concerns will give it a *marginal* advantage over less responsible actors. But the irreducible residuum of vagueness, uncertainty, and evasion may diminish, and perhaps completely eliminate, the marginal competitive advantage the tort system bestows on the responsible producer. The magnitude of this detrimental impact is, of course, an empirical question: tort rules, in practice, may result in producer behavior that is largely efficient, somewhat efficient, or perhaps not efficient at all. Yet the mere fact that some such shortfall

136. *Id.* See also Easterbrook & Fischel, *supra* note 57, at 111 (noting that universal abrogation of limited liability in parent-subsidiary context creates perverse incentive for disintegration of economic activity).

137. *Cf.* Coffee, *supra* note 73, at 390:

[T]he maximum meaningful fine that can be levied against any corporate offender is necessarily bounded by its wealth. . . . [T]his wealth boundary seems an absolute limit on the reach of deterrent threats directed at it. If the "expected punishment cost" necessary to deter a crime crosses this threshold, adequate deterrence cannot be achieved.

See also Keeton & Kwerel, *Externalities in Automobile Insurance and the Uninsured Driver Problem*, 27 J.L. & ECON. 149 (1984) (discussing problems deterring judgment-proof drivers).

138. Or, as Janis Joplin once sang, "Freedom's just another word for nothing left to lose." Kristofferson & Foster, *Me and Bobby McGee* (as performed by Janis Joplin on her *Pearl* album) (Columbia Records, 1971).

inevitably occurs calls into question the likelihood of success of a reform crusade that has social efficiency as its singular and absolute quest.

B. *The Wisdom of Reform*

Moreover, even if tort law *could* be reformed to achieve a socially efficient level of product safety, one might question whether it *should* be. At first blush, this assertion seems heretical, if not insane. How can anyone reasonably question the value of reforms aimed at creating a socially optimal level of safety? But that states the issue too narrowly. The question is not whether such a goal is important — for it surely is — but whether its attainment through tort reform conflicts with other, equally important social agendas. In particular, consider the problem of evasive behavior discussed above. Although such conduct clearly impairs the social efficiency function of tort, it is important to remember that the various forms of such behavior we have considered — limited liability, the use of subsidiaries, the discharge of obligations in bankruptcy — all represent legislatively sanctioned, perfectly legal business strategies.

Viewed in this light, these forms of evasive behavior suddenly shed their nefarious character, and demand respect. They can claim to serve a public purpose, yet it is one that lies in apparent conflict with the social efficiency goal of tort. For while tort law's central message to producers is "Take care, for you shall pay for the harms you cause," corporate and bankruptcy laws respond: "Take some risks, and in return, your losses will be limited if things go poorly." While the social efficiency model speaks of equilibriums, of optimal decisions, of careful weighings of risk and benefit, business law speaks of dynamic change, of experimentation, of gambles taken.¹³⁹ The ethic of caution confronts the spirit of entrepreneurism.

I leave for another day the question of whether this doctrinal conflict is, in the contemporary lexicon, "fundamental" or instead is merely a "tension" ultimately reconcilable on some level of abstraction. I defer here not because the question is unimportant, but because, regardless of its outcome, the conflict between the law's admonition of caution and its equally strong encouragement of risk-taking nonetheless poses severe problems for any tort reform agenda. For if, on the one hand, the unfettered liability favored by contemporary tort theory is ultimately viewed as plainly inconsistent with basic

139. Cf. Rizzo, *supra* note 45, at 291 (emphasizing the conflict between the social efficiency model's static nature and the "unpredictable flux" of the real world).

premises of business law, reforms aimed at improving the social efficiency of tort must ultimately compete in the political arena with concerns that serve contrary ends. If this is the case, the best that tort reform may hope to achieve is some sort of sorry stalemate that suits neither camp particularly well.

On the other hand, if the policy concerns underlying tort and business law can be squared on some level of analysis, it is one that lies far beyond the current dominion of tort theory. Specifically, if efficiency is to remain the objective, the scope of inquiry must be vastly expanded. No longer can a reform be justified simply because it eliminates some degree of evasive behavior and thus improves the law's policing of product safety. Instead, such benefits must be weighed against the costs — in terms of decreased risk-taking, innovation, and business formation — that such an inroad into the evasion-sanctioning doctrines of business law might entail.¹⁴⁰

Consider, for example, the recent proposal of a leading tort scholar to abolish limited liability, adopt global successor liability rules, and preclude discharge of contingent tort claims in bankruptcy so that “[c]orporate and bankruptcy law [will] . . . function to advance the goals that products liability law should serve.”¹⁴¹ Assuming for a moment that such changes would not suffer from the problems of implementation noted above, the analysis is still painfully incomplete. It assumes that the policies underlying corporate and bankruptcy law are indifferent to, and unaffected by, such radical changes. Yet it seems most implausible that the *current* configurations of such bodies of law are devoid of any special benefits that might be impaired or destroyed if corporate and bankruptcy law are conscripted to serve in the crusades of tort. Instead, before one can conclude that such changes actually improve social welfare, a far more extended calculus must be run. The benefits on the tort side of the ledger must not only be tabulated, but also netted against the deficits such changes in corporate and bankruptcy law might generate.¹⁴²

140. See, e.g., Posner, *The Rights of Creditors of Affiliated Corporations*, 43 U. CHI. L. REV. 499 (1976) (negative affects of abolishing limited liability); Schwartz, *supra* note 39, at 720 (expanding successor liability to cover remote risks would debilitate used asset market); Easterbrook & Fischel, *supra* note 57, at 104 (“The social loss from reducing investment in certain types of projects — a consequence of seriously modifying limited liability — might far exceed the gains . . .”); Roe, *supra* note 122 (discussing trade-off between expanded successor liability and decreased asset transferability).

141. Schwartz, *supra* note 39, at 717-18.

142. Cf. Schwartz, *Directions in Contemporary Products Liability Scholarship*, 14 J. LEGAL STUD. 763, 774 (1985) (efficiency explanations for limited liability must be understood before accepting Schwartz's proposal, note 141 *supra* and accompanying text, to abolish doctrine to further tort reform).

Thus, for example, a comprehensive, efficiency-oriented analysis of such reforms must determine to what extent altering the doctrine of limited liability will depress capital formation, inhibit the liquidity of the equity markets, contract the base of business ownership, and increase the costs of monitoring management.¹⁴³ It must ask whether expanding the successor liability rules will generate unacceptable levels of asset abandonment and encourage inefficient, rule-evading transfers.¹⁴⁴ And such an analysis must decide whether closing the sanctuary of bankruptcy reorganization to tortfeasors will preclude the rehabilitation of potentially viable businesses and shunt such actors into the relatively lawless process of self-liquidation.¹⁴⁵

These are the sorts of inquiries that must be pursued, and the results of which must be quantified, before one can really talk sensibly about the efficiency-enhancing effects of proposed reforms. Yet, the sheer magnitude of the task is bewildering, if not impossible.¹⁴⁶ And even if it is theoretically possible to reconstruct the notion of social efficiency in such an abstract and comprehensive fashion, can there be any realistic faith in the ability of contemporary lawmaking institutions to create rules that in practice come close to striking such a global balance? The available candidates are the courts and the legislatures, the very parties that started the fight. Others have argued that both institutions are, by their very nature, incapable of playing the role of Solomon,¹⁴⁷ yet that would seem to be what is required.¹⁴⁸

Alternatively, one might put aside the effort to retrofit social efficiency onto tort law, and instead choose to view it from alternative,

143. See text at note 59 *supra*.

144. See text at notes 128-31 *supra*.

145. See Roe, *supra* note 67.

146. Cf. Rizzo, *supra* note 6, at 642 ("While in principle all of the spillover effects of alternative legal rules might be totalled and the socially value-maximizing set of rules specified, the information requirements for such an achievement are well beyond the capacity of the courts or anyone else.") (footnote omitted).

147. A number of critics have argued that the tort system is incapable of resolving such complex, multi-faceted conflicts. See Henderson, *Judicial Review of Manufacturers' Conscious Design Choices: The Limits of Adjudication*, 73 COLUM. L. REV. 1531 (1971) (discussing limited competence and perspective of courts in complex products liability cases); Huber, *supra* note 43 (same). Others have questioned the capacity of the legislative and regulatory processes to make socially optimal decisions free from undue influence by special interest groups. See, e.g., Stigler, *The Theory of Economic Regulation*, 2 BELL J. ECON. & MGMT. SCI. 3 (1971); Becker, *A Theory of Competition Among Pressure Groups for Political Influence*, 98 Q.J. ECON. 371 (1983); Noll, *The Political Foundations of Regulatory Policy*, 139 J. INSTL. & THEORETICAL ECON. 377 (1983); Peltzman, *Toward a More General Theory of Regulation*, 19 J.L. & ECON. 211 (1976). See generally Farber & Frickey, *The Jurisprudence of Public Choice*, 65 TEXAS L. REV. 873 (1987).

148. See Shavell, *Liability for Harm Versus Regulation of Safety*, 13 J. LEGAL STUD. 357 (1984) (an illuminating discussion of the comparative efficacy of tort rules and direct regulation in varying contexts).

overtly noneconomic perspectives.¹⁴⁹ Thus, the tort system might be more productively analyzed as a judicial mechanism for prodding legislative action,¹⁵⁰ or as a tribal device for articulating fears, prejudices, and values,¹⁵¹ or perhaps simply as Robin Hood writ large.¹⁵² Such perspectives lack the cleanliness and precision of the social efficiency model of tort, but they may fall closer to the mark.

CONCLUSION

The social efficiency model of tort is a theory many of us want to believe. It warms and assures us with the idea that the world makes sense, that order lurks beneath the surface chaos of accidents and injuries. Yet, on critical examination, the model's patina of rigor appears somewhat tarnished. The difficulty lies not with its internal logic, but with the rigid assumptions necessary to bring it to life. Once these assumptions are relaxed to better reflect real world constraints, the model's conception of tort law as a system of effective incentives toward optimal producer behavior becomes questionable.

Internally, tort law's need for predictability clashes with its dependence on inevitability. And its inadequate response to the problems of uncertainty generated by remote risks and doctrinal shifts makes it difficult for even the most attentive producer to follow its directives. Externally, tort law's promotion of caution confronts the unruly terrain of business law, where an entirely different, and partly hostile, ethic prevails. The discipline tort law hopes to impose on all producers is undercut as some, either because they care less about the consequences of disobedience or because they are torn by internal conflict, break ranks and shirk their liabilities.

Whether, in light of the above, tort law can achieve social effi-

149. Cf. Rizzo, *supra* note 6, at 642 ("[I]f we cannot determine with any reasonable degree of accuracy when an overall efficiency improvement has occurred, the normative attractiveness of that goal must be thrown into serious doubt.").

150. See generally Zacharias, *The Politics of Torts*, 95 YALE L.J. 698 (1986).

151. Huber, for example, attacks the tort system precisely because, in his view, it systematically fails to address significant "private" risks, while fixating on less dangerous "public" risks. Huber, *supra* note 43, at 279-90. Implicit in his argument is the notion that any good society should necessarily rank risks purely according to their quantitative potential for harm, and devote its energies to minimizing such harms. Yet, even the most modern of societies often demonstrate "irrational" patterns of risk preference, ignoring some major threats while lavishing vast resources on what — from a purely quantitative perspective — are relatively minor dangers. See generally M. DOUGLAS & A. WILDAVSKY, *RISK AND CULTURE: AN ESSAY ON THE SELECTION OF TECHNICAL AND ENVIRONMENTAL RISKS* (1982). In this regard, attacks such as Huber's against the tort system are of limited utility; the task is not merely to bemoan the irrationality of society's risk preferences, but to understand why — in a system where both legislative and judicial change is possible — such preferences nonetheless exist.

152. See, e.g., Huber, *supra* note 43, at 319.

ciency becomes a very difficult question to answer, particularly in an abstract and universal way. The truth, if it can be known, may be that tort rules are only capable of forcing manufacturers to behave somewhat efficiently, some of the time, under some conditions. For some, this may be enough. For others, however, the shortcomings of tort law seem to demand reform.

Yet here, the article suggests, a new set of frustrations arise. As reform crusades venture beyond the perimeter of tort law into the broader legal environment, they confront the ever changing stratagems and guerilla tactics of business planners. Some areas may be pacified, but in others, resistance continues. Some producers may acquiesce in the new regime, but others escape to the border sanctuaries of corporate and business law. Nor is it simply a matter of adopting proper tactics, for on a more fundamental level, the generals of tort reform face a bitter struggle for the hearts and minds of the populace. They offer safety and responsibility; their opponents speak of bold gambles and freedom. Both anthems have strong appeal, and hence the prospect of a final, decisive victory remains dim.

Thus, the central themes of this article — that tort law does not necessarily push producers towards a socially efficient level of product safety, that reform efforts are doomed to partial failure, and that even attempting such reforms is risky business — probably strike most as depressing. This is hardly surprising; the social efficiency vision is narcotic in its effect, and its rejection is therefore not without cost. But recognizing the limits of the model does not require rejecting efficiency as a value, economic analysis as a tool, or tort reform as a goal. Rather, it simply means accepting the complexity of the world and its mischievous resistance to single-minded pursuits.