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Rescuing the Revolution: The Revived Case for Enterprise Liability

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RESCUING THE REVOLUTION: THE REVIVED CASE FOR ENTERPRISE LIABILITY

Steven P. Croley* and Jon D. Hanson**

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INTRODUCTION

Products liability law is salient as never before. Recent developments in products liability and in markets affected by products liability have engendered spirited debate about the efficacy of tort law in regulating consumer product risks and about the need for products liability
reform. Manufacturer associations, insurance companies, and consumer groups, in addition to lawyers, policy analysts, and scholars, have taken sides. Since January 1989, at least half a dozen bills have been introduced in Congress in an effort to reform the products liability system — evidence of the extent to which products liability has come into the national policymaking spotlight. Such bills have been common in recent Congresses; in the final months of the 102d Congress, S. 640, the "Products Liability Fairness Act," backed by moderate Senate Democrats, came within two votes of escaping a filibuster.

1. See, e.g., Stephen Labaton, Product Liability's "Quiet Revolution," N.Y. TIMES, Nov. 27, 1989, at D2 (describing reaction of manufacturers and their insurers to insurance crisis and attributing recent changes in products liability law to the influence of manufacturers and insurers).


6. See Senate Kills Legislation To Curb Liability Suits, N.Y. TIMES, Sept. 11, 1992, at D4. The Bush administration strongly supported tort reform. See generally George Bush, Excessive Tort Litigation Costs Vaporize Profits, NATL. L.J., Nov. 2, 1992, at 15; Dan Quayle, Civil Justice Reform, 41 AM. U. L. REV. 559 (1992). Although Bill Clinton's election victory, as well as the electoral defeat of Senator Robert Kasten (R-Wis.), S. 640's chief proponent, seem likely to slow the tort reform movement, see Margaret C. Fisk, The Reform Juggernaut Slows Down, NATL. L.J., Nov. 9, 1992, at 1, it is not at all clear that the new administration will be unfriendly to moderate reform measures, see, e.g., William Fay, Invisible "Lawyers Tax," WASH. TIMES, July 24, 1991, at G3 (noting bipartisan backing of S. 640, whose sponsors included Senators Jay Rockefeller (D-W.Va.) and John Danforth (R-Mo.)); Greg Rushford, Fewer Hassles for the Tassels; Tort-Reform Efforts May Be Dead in the Water, LEGAL TIMES, Nov. 9, 1992, at 24 (Victor Schwartz, counsel to the Product Liability Alliance, predicting that Clinton will not be knee-jerk tort reform opponent, and Stuart Rickerson, Vice President of the Keene Corp., a major asbestos defendant, stating that he looks forward to working with the Clinton administration on tort reform); Alessandra Stanley, Selling Voters on Bush, As Nemesis of Lawyers, N.Y. TIMES, Aug.
While the heightened salience of products liability is no doubt a source of excitement for students of the subject, it brings controversy and confusion. Ongoing debates involve such complicated issues as the extent to which consumers are informed of product risks, the efficiency of awarding punitive damages and pain-and-suffering damages, the relative merits of various substantive standards of tort liability such as strict liability and negligence, the relative advantages of first-party and third-party insurance systems, the efficiency of

31, 1992, at A1 (explaining that products liability reform is not entirely partisan issue and noting support for reform by Senate liberals). In fact, in the vice-presidential debates between Al Gore and Dan Quayle, Gore referred approvingly to Arkansas' tort reform. Meanwhile, many states have passed tort reform measures, see, e.g., The Tort Movement's Progress Across the Nation, NATL. L.J., Nov. 9, 1992, at 35 (outlining tort reform measures state by state), and the American Law Institute has named James Henderson and Aaron Twerski as reporters for what will become the Restatement (Third) of Torts, with a primary focus on products liability, see Henry J. Reske, Experts Tackle Tort Restatement, 78 A.B.A. J., Aug. 1992, at 18.


9. Compare Steven Shavell, Economic Analysis of Accident Law 229-30 (1987); George L. Priest, The Current Insurance Crisis and Modern Tort Law, 96 YALE L.J. 1521, 1553 (1987); and Schwartz, supra note 7, at 364-65 (all arguing that from an insurance perspective damages for nonpecuniary losses are inefficient because consumers do not demand such insurance) with Croley & Hanson, supra note 4, at 59-67 (arguing that as a theoretical matter whether consumers demand insurance against nonpecuniary losses is unclear); Steven P. Croley & Jon D. Hanson, The Nonpecuniary Costs of Accidents (1992) (unpublished manuscript, on file with authors) (arguing that consumers demand some amount of insurance against nonpecuniary losses); and Ellen Smith Pryor, The Tort Law Debate, Efficiency, and the Kingdom of the Ill: A Critique of the Insurance Theory of Compensation, 79 VA. L. REV. 91 (1993) (questioning use of insurance theory as meaningful guide to injured individuals' compensation preference for nonpecuniary losses).

10. Compare Landes & Posner, supra note 7, at 293-94; Richard A. Posner, Economic Analysis of Law 166 (3d ed. 1986); and Schwartz, supra note 7, at 392-404 (all arguing in favor of strict liability under certain circumstances) with Richard A. Epstein, Modern Products Liability Law 40-48 (1980); Huber, supra note 8, at 36-44; and Priest, supra note 9, at 1534-39 (all arguing against strict liability). These scholars' positions are discussed infra sections III.B and III.C.

11. Compare George Priest, Understanding the Liability Crisis, in New Directions in Liability Law 196, 204-05 (Walter Olson ed., 1988) (arguing that first-party insurance is more efficient than manufacturer-provided insurance) with Jon D. Hanson & Kyle D. Logue, The First-Party Insurance Externality: An Economic Justification for Enterprise Liability, 76 CORNELL L. REV. 129, 137-59 (1990) (arguing that manufacturer-provided insurance may be more efficient than first-party insurance).
product warranties, the ability of courts and juries to assess damages, and the effect of products liability on the country's economy. Some of these issues reflect the far more fundamental question of what social institution or collection of social institutions — including the tort system, administrative agencies, and the marketplace — can most efficiently allocate the risk of personal injury from consumer product accidents.

Products liability is unique. From its inception, modern products liability has occupied an uncertain position between contract law and tort law. Indeed, as this article will show, both the evolution of products liability and the ongoing debates over the efficiency of modern products liability are, at bottom, driven by the question of where between tort and contract consumer product transactions are most aptly located. On one hand, the relationship between manufacturer and consumer seems much like that between injurer and victim in the proverbial tort case, in which the costs of contracting are prohibitively high and parties encounter one another only by accident — as when


13. Compare Huber, supra note 8, at 50-51, 185-87 (arguing that juror sympathy leads to incoherent outcomes and excessive damages) with W. Kip Viscusi, Pain and Suffering in Product Liability Cases: Systematic Compensation or Capricious Awards?, 8 Int'l Rev. L. & Econ. 203 (1988) (concluding that pain-and-suffering awards are not generally random or capricious).


Lawsuits over allegedly defective products have been another great area of growth for the litigation business, with results equally inimical to the welfare of society. In each manufacturing industry to come under sustained courtroom assault — prescription drugs, vaccines, contraceptives, sporting equipment, small planes, small cars, insulation materials — products that represent a valuable choice over some of the remaining alternatives have been either driven off the market or not introduced for fear of liability, with increasingly tragic results for the public health.

No other country's legal system operates remotely like ours.
one car collides with another.\textsuperscript{15} Understood in this way, a manufacturer's liability disclaimer in its product warranty is analogous to a car owner's bumper sticker that disclaims liability for all injuries that she might cause. No court is likely to enforce a bumper sticker disclaimer. On the other hand, products liability may be more aptly characterized as contract, in light of the fact that some preaccident relationship does exist between the manufacturer and consumer: namely, the market. If no significant market imperfections impede consumer product markets, those markets will, as legal economists commonly emphasize, yield efficient results. Consumer preferences will determine the safety and quality of products and the terms of product warranties. So long as markets work, courts should permit manufacturers and consumers to contract around products liability laws. One's position, therefore, on whether courts should treat products liability law as contract or as tort — that is, whether courts should permit manufacturers and consumers to contract around a liability standard or, instead, the liability standard should be mandatory — turns on one's view of whether consumer product markets work.

Other things equal, legal economists typically prefer freedom of contract over immutable liability standards.\textsuperscript{16} By most accounts, an

\textsuperscript{15} Because one motorist cannot affordably negotiate with all other motorists over how to allocate liability in the event of a future accident, tort law picks up where contract law leaves off. \textit{See generally} Guido Calabresi & A. Douglas Melamed, \textit{Property Rules, Liability Rules, and Inalienability: One View of the Cathedral}, 85 Harv. L. Rev. 1089 (1972); \textit{Landes & Posner, supra} note 7, at 29-53. As Landes and Posner explain:

\begin{quote}
When the costs of voluntary market transactions are low, the property approach is economically preferable to the liability approach because the market is a more reliable register of values than the legal system. But when the costs of voluntary market transactions are high, the property approach is inferior because it will prevent resources from being shifted to their most valuable uses.
\end{quote}

\textit{Id.} at 31. Tort law can thus be understood as a set of implied contract terms that the parties would have agreed to had the transaction costs of contracting not been so high. To be sure, implied terms are an important element of contract law as well. \textit{See generally} Ian Ayres & Robert Gertner, \textit{Filling Gaps in Incomplete Contracts: An Economic Theory of Default Rules}, 99 Yale L.J. 87 (1989). In fact, the Uniform Commercial Code can be understood as a set of gap-filling rules to which contracting parties are bound unless the parties expressly contract around them. \textit{See Alan Schwartz & Robert E. Scott, Commercial Transactions} 166 (1982). The same has been said of state corporate law. \textit{See generally} Bernard S. Black, \textit{Is Corporate Law Trivial?: A Political and Economic Analysis}, 84 NW. U. L. Rev. 542 (1990). In this respect, tort and contract have much in common. The crucial difference between the two, of course, is that most contract rules are default rules, whereas tort rules are usually immutable by contract.

\textsuperscript{16} For example, Anthony Kronman, in his capacity as legal economist, has written:

\textit{Ex ante} arguments for the efficiency of a particular legal rule assume that individuals remain free to contract around that rule, and a legal system that denies private parties the right to vary rules in this way will tend to be less efficient than a system that adopts the same rules but permits contractual variation.

Anthony T. Kronman, \textit{Specific Performance}, 45 U. Chi. L. Rev. 351, 370 (1978); \textit{see also} \textit{Landes & Posner, supra} note 7, at 31 ("the market is a more reliable register of values than the legal system"); Ayres & Gertner, \textit{supra} note 15, at 88 ("Immutability is justified only if unregulated contracting would be socially deleterious because parties internal or external to the contract
immutable liability rule is justified if and only if it prevents some significant negative externality or other market failure. For example, most legal economists agree that manufacturers should not be permitted to avoid liability when their products injure third-party bystanders (as opposed to the purchasing consumers themselves). 17 In such cases, neither a price nexus nor anything approximating a contractual relationship binds the manufacturer and the injured party. Thus, without manufacturer liability, the costs of such accidents would be externalized upon third parties. Few dispute, therefore, that the rules allocating liability to manufacturers for third-party injuries should be mandatory. 18 Because claims brought by third parties constitute only a tiny percentage of all products liability cases, however, the difficult questions articulated above remain unanswered with regard to the vast majority of products liability cases.

Judges and scholars who have contributed to the evolution of products liability have inevitably, though often unknowingly, taken positions regarding, first, whether the liability standard should be a default or a mandatory standard (the mutability dimension) and, second, which liability standard is preferable among (a) absolute consumer liability, (b) negligence, (c) strict liability, and (d) absolute manufacturer liability (the liability-standard dimension). 19 By locating classic products liability cases and influential products liability scholars in a matrix defined by these two dimensions, 20 this article illustrates how products liability scholarship and the eventful history of products liability law are best understood — indeed, can be properly understood only — in terms of those two dimensions.

In so doing, this article attempts to shed light on products liability at several levels. Close to the surface, this article provides an accessible framework, the Products Liability Matrix, for understanding the rich products liability literature and jurisprudence — a primer both to the current, heated debates in the products liability literature and to
products liability law generally. But that largely pedagogic benefit is merely the happy byproduct of this article’s other goals, which include challenging the contemporary wisdom regarding the reasons that, and ways in which, products liability should be reformed.

Broadly speaking, the trend in products liability law over recent decades has been to treat products liability cases more and more as tort rather than as contract cases. Yet the bulk of current scholarly wisdom now sees this increased reliance on tort law as harmfully misguided. Indeed, a common theme uniting one of the two main camps of products liability scholars — the contractarians — is that manufacturers should be permitted to contract around standards imposed by products liability law through product disclaimers, warnings, and warranties. This camp of scholars would entrust allocation of consumer product risks largely to contract law. Scholars comprising the other main camp — the regulators — do not share the contractarians’ faith that contractual allocations of consumer product risks will yield efficient results, but most nevertheless join the contractarians in advocating a curtailed role for tort law. Those regulators urge that consumer product risks be largely relegated to administrative regulation. Both the contractarians and the regulators have voiced their prescriptions with increasing urgency of late. Judges and legislators, now persuaded that modern products liability law is to blame for the liability insurance crisis and in part for the nation’s apparent inability to compete successfully with foreign manufacturers, are taking action. This article reveals fundamental tensions within the arguments and reform proposals of scholars in both camps. Those tensions emerge, in large

21. This article does not examine the scholarship of all of the participants in the products liability debate, but rather a representative sample of them. We do not consider the work of such prominent scholars as Kenneth Abraham, Patricia Danzon, James Henderson, Jeffrey O’Connell, David Owen, Robert Rabin, David Rosenberg, Gary P. Schwartz, Michael Trebilcock, Aaron Twerski, and Paul Weiler, among others. We also do not address the arguments contained in the excellent two-volume Reporters’ Study of the American Law Institute on enterprise liability. THE AMERICAN LAW INSTITUTE, ENTERPRISE RESPONSIBILITY FOR PERSONAL INJURY (1991). We do, however, examine the positions of two of its primary contributors, Alan Schwartz and W. Kip Viscusi, whose views are substantially reflected in the relevant chapters of the study. In part because a major goal of this article is to stimulate dialogue among products liability scholars, we chose to narrow our attention to those with whom subsequent dialogue was possible.

22. See infra Part II.

23. See infra section III.B.2.

24. See infra section III.C.2.

25. See Croley & Hanson, supra note 4, at 5-8 (explaining critics’ characterizations of the “crisis”).


27. See supra note 5 and accompanying text (reviewing recent prodefendant trends in products liability).
part, from the fact that products liability scholars have failed to appre­ciate fully either the significance of, or the relationship between, the mutability dimension and the liability-standard dimension of products liability. In a more constructive vein, this article also makes an affirm­ative case for a particular products liability regime, a regime that both camps in the current debate strongly oppose: enterprise liability.28

The article proceeds as follows. Part I defines important terms and introduces the two-by-four Products Liability Matrix by explaining the eight possible positions that might be taken with respect to the mutability and liability-standard dimensions of products liability. Part II provides a backdrop for the current products liability debate, first by setting out a capsule history of the evolution of the modern products liability regime, and then by explaining the arguments offered by the "first generation"29 of products liability scholars to justify expanded manufacturer liability. Part II also illustrates the utility of the Products Liability Matrix by locating many of the landmark products liability cases within it. (Readers already familiar with the history of products liability may want to skip Part II, though they may find that examining classic cases in terms of the Products Liability Matrix offers some novel insights into an otherwise familiar area.)

Having provided the necessary framework in Parts I and II, the article in Part III analyzes the current products liability debate by critiquing individual members of the contractarians' and regulators' camps. Part III first sets forth the contractarians' seemingly successful rejection of the first generation's rationales for expanded manufacturer liability. Part III then uses the Products Liability Matrix to show how scholars in both the contractarians' and the regulators' camps have taken positions in one dimension of the Matrix that are in tension with the positions they take in the other dimension. Part III further explains why the current products liability debate is unsatisfying.

Part IV provides an affirmative case for enterprise liability by artic-
ulating the market failures that necessitate regulation. By offering new arguments on behalf of the old justifications for the expansion of manufacturer liability, Part IV revives the legacy of the first generation, whose instincts Part IV argues were correct but whose arguments lacked economic sophistication and thus provided an easy target for the present generation of products liability scholars.\textsuperscript{30}

\section{INTRODUCING THE PRODUCTS LIABILITY MATRIX}

\subsection{A Taxonomy of Product Accidents}

There are two broad categories of product-caused accidents: (1) \textit{preventable accidents}, which can be cost-justifiably prevented through care-level investments\textsuperscript{31} and (2) \textit{unpreventable accidents}, which are not preventable (as defined here).\textsuperscript{32} Further, there are two broad types of preventable accidents: (a) \textit{initially preventable accidents}, which are preventable by manufacturers at least cost and (b) \textit{residually preventable accidents}, which are preventable by consumers at least cost. Finally, \textit{secondarily preventable} accidents comprise that subset of residually preventable accidents that are preventable by manufacturers (but not at least cost).

\subsection{A Taxonomy of Liability Rules}

Accident costs are necessarily borne by either manufacturers or consumers.\textsuperscript{33} In general terms, there are four possible standards for allocating liability for those costs. Scholars and judges can thus be classified according to which liability standard among the four they prefer. The possibilities are: (1) absolute consumer liability; (2) negligence; (3) "strict" liability; and (4) absolute manufacturer liability. As

\textsuperscript{30} For complementary parts of this larger project, see Croley & Hanson, supra note 9; Croley & Hanson, supra note 4; Hanson & Logue, supra note 11.

\textsuperscript{31} Legal economists agree that an efficient products liability regime would accomplish two economic goals. First, it would encourage parties to prevent all accidents that can be efficiently prevented: the \textit{deterrence goal}. Second, it would efficiently allocate the risk of unpreventable accident costs: the \textit{insurance goal}. See, e.g., John E. Calfee & Clifford Winston, \textit{Economic Aspects of Liability Rules and Liability Insurance}, in \textit{LIABILITY: PERSPECTIVES AND POLICY} 16 (Robert E. Litan & Clifford Winston eds., 1988); Priest, supra note 9, at 1537. A liability regime can have two principal deterrent effects: the \textit{activity-level effect} and the \textit{care-level effect}. The activity-level effect is the change in the total costs of accidents resulting from a change in the frequency with which the parties engage in an activity, holding care levels constant. The care-level effect is the change in the costs of accidents resulting from a change in the amount of care taken by the parties, holding activity levels constant.

\textsuperscript{32} We do not mean by \textit{unpreventable} either that an accident could not be cost-justifiably prevented through activity-level investments or that the accident could not be prevented through care-level investments that are not cost-justifiable.

\textsuperscript{33} That is, in the absence of social insurance schemes, which impose the costs on society as a whole.
none of these terms is self-defining, \(^{34}\) a brief definition of each is necessary.

Under absolute consumer liability, sometimes referred to as no liability, all of the costs of product accidents are borne by consumers, irrespective of manufacturers’ behavior.

Negligence, sometimes referred to as the Learned Hand Test, is the legal standard according to which a manufacturer is liable for injuries if and only if the manufacturer failed to exercise “due care,” where due care requires taking all cost-justified care-level precautions that the manufacturer can take at least cost. Put differently, a negligence rule places liability on the defendant manufacturer if and only if the accident was initially preventable. The consumer bears losses resulting from accidents that are not initially preventable.

Strict liability, or the reverse Learned Hand test, in contrast, places liability on the manufacturer for all but residually preventable accidents. \(^{35}\)

Finally, under absolute manufacturer liability, all of the costs of product accidents are borne by manufacturers, irrespective of consumers’ behavior — that is, including residually preventable accidents. \(^{36}\) Absolute manufacturer liability is thus the inversion of absolute consumer liability, just as strict liability is the inversion of negligence. Enterprise liability denotes a particular subspecies of absolute

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34. Indeed, several of the terms have been used to denote several different things. See, e.g., infra notes 35, 37.

35. To legal economists, strict liability means that a defendant shall be liable for injuries caused by the defendant’s behavior even when the defendant had met or exceeded some measure of due care and even when the plaintiff failed to exercise some measure of due care. Often, legal economists use this term interchangeably with absolute liability and enterprise liability. See, e.g., Shavell, supra note 9, at 4-32. The term has also been employed to mean that a manufacturer shall be liable for injuries resulting from product defects only if the manufacturer failed the test for any one of three types of defects — design defects, manufacturing defects, and inadequate warnings. See Schwartz, supra note 7, at 369-70. Finally, strict liability is sometimes used to denote that a liability standard is immutable by contract. This article uses the term strict liability to denote a particular standard of liability, not immutability of a given liability standard by contract. Moreover, by holding consumers liable for residually preventable accidents, strict liability, as this article defines it, includes the equivalent of a contributory negligence defense.

36. For simplicity, this article will ignore possible variations on these four rules. Little is lost in failing to consider a negligence rule that includes a defense of contributory negligence, or other such variations. As Landes and Posner have emphasized, there are no efficiency benefits to be had from adding the defense. See Landes & Posner, supra note 7, at 73-77. The definitions of negligence and of strict liability are the two versions of Priest’s general cost-benefit standard, which holds that “liability should be placed on the party for whom marginal prevention costs are lower, . . . as long as marginal prevention costs are lower than the marginal benefits of prevention.” George L. Priest, Products Liability Law and the Accident Rate, in LIABILITY: PERSPECTIVES AND POLICY 196-97 (Robert E. Litan & Clifford Winston eds., 1988). The only difference between a negligence rule and a strict liability rule has to do with who pays for unpreventable accidents. Under negligence the consumer pays, whereas under strict liability the manufacturer pays. With both of these two possibilities represented, considering the general cost-benefit standard under additional names would needlessly complicate the analysis.
manufacturer liability — absolute manufacturer liability that is immutable by contract.\textsuperscript{37}

\begin{table}
\caption{The Products Liability Matrix: Possible Liability Regimes}
\begin{tabular}{lll}
\hline

 & \textbf{Degree of Mutability} \\
 & \textbf{(Column 1)} & \textbf{(Column 2)} \\
 & Default & Mandatory \\
\hline
\hline
\text{Absolute Consumer Liability} & (Row 1) & (Box 1) \\
\text{Negligence} & (Row 2) & (Box 3) \\
\text{Strict Liability} & (Row 3) & (Box 5) \\
\text{Absolute Manufacturer Liability} & (Row 4) & (Box 7) \\
\hline
\end{tabular}
\end{table}

Each of the four liability standards can be either mutable by contract or mandatory. Thus, as the Products Liability Matrix (Table 1) illustrates, there are eight possible products liability regimes. The eight regimes, represented by Boxes 1-8, include all possible combinations of answers to the two questions that define its two dimensions: (1) Should the liability standard be mutable or immutable by contract — that is, should the relationship between manufacturer and consumer be viewed as one in contract or as one in tort? — and (2) What should the liability standard be?

II. A SHORT HISTORY OF PRODUCTS LIABILITY

Over the past century, products liability has shifted from the northwest corner, Box 1, toward the southeast corner, Box 8, of the Products Liability Matrix.\(^{38}\) That is, products liability has moved from absolute consumer liability toward absolute manufacturer liability and, at the same time, from contract to tort. The first generation of products scholars supported this movement, but, as explained below, the present generation widely criticizes it. Section II.A describes the most important stages of the movement. Section II.B explains the arguments that motivated it.

A. Moving Through the Matrix: The Classic Cases

In products liability cases at the end of the nineteenth century, American courts recognized the "privity rule," which originated in the famous English case, Winterbottom v. Wright.\(^ {39}\) On August 8, 1840, Coachman Winterbottom boarded a royal mail coach to deliver mail from Hartford to Holyhead. On the way to Holyhead, the mail coach collapsed, injuring Winterbottom as he was thrown to the ground. He sought recovery in negligence for his injuries from defendant Wright, who had contracted with Winterbottom's employer, the Postmaster General, to keep the mail coaches in operating condition.

According to the privity rule, the negligent supplier of a defective product was only liable to those with whom he had directly dealt in the supply contract. Lord Albinger, the judge in Winterbottom, reasoned thus:

There is no privity of contract between [the plaintiff and the defendant]; and if the plaintiff can sue, every passenger, or even any person passing

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38. See Croley & Hanson, supra note 4, at 1-6 (describing four stages of the "shift away from principles of contract and negligence, toward the principle of enterprise liability"). See generally WILLIAM KIMBLE & ROBERT O. LESHER, PRODUCTS LIABILITY chs. 1 & 2 (1979) (discussing development and theories of products liability).

along the road, who was injured by the upsetting of the coach, might bring a similar action. Unless we confine the operation of such contracts as this to the parties who entered into them, the most absurd and outrageous consequences, as to which I can see no limit, would ensue.\(^{40}\)

Albinger's strong protection of manufacturers and service providers reflected a legal tradition that was to last throughout the Industrial Revolution, a tradition that Justice Holmes often receives credit for confirming in his famous Harvard lecture, in which he noted that “[t]he general principle of our law is that loss from accident must lie where it falls.”\(^{41}\) The privity rule protected manufacturers from the claims of injured consumers. Where the consumer was not in “privity of contract” with the manufacturer, the consumer could not recover from the manufacturer or service provider even when the manufacturer's negligence was directly and foreseeably the cause of injury.\(^{42}\) Instead, consumer recovery was only available by virtue of express or implied warranties.\(^{43}\)

The Winterbottom court explicitly recognized the implication of the rule it articulated. Acknowledging that a rule that excluded manufacturers from liability would mean consumers would have to bear accident costs, Lord Albinger wrote: “It is, no doubt, a hardship upon the plaintiff to be without a remedy, but by that consideration we ought not to be influenced.”\(^{44}\) The products liability regime of a cen-


\(^{41}\) O.W. HOLMES, JR., THE COMMON LAW 94 (1881). Holmes also expressed an alternative view: “[T]he safest way to secure care is to throw the risk upon the person who decides what precautions shall be taken.” Id. at 117. In a forthcoming book on Holmes, David Rosenberg provides a scholarly and provocative reinterpretation of Holmes' theory of tort law. DAVID ROSENBERG, HOLMES AND THE THEORY OF TORTS (forthcoming 1994). Rosenberg challenges the conventional wisdom that Holmes opposed strict liability and favored negligence. Rosenberg reviews the entire Holmesian corpus on tort law and concludes that Holmes actually favored strict liability — though, according to Rosenberg, Holmes would have required a showing of foreseeability as well as a showing of causation — and that Holmes was not motivated by the goal of subsidizing the industrial revolution.


\(^{43}\) See Richard A. Epstein, Products Liability as an Insurance Market, 14 J. LEGAL STUD. 645, 654-55 (1985); Priest, supra note 37, at 461; see also George L. Priest, Strict Products Liability: The Original Intent, 10 CARDOZO L. REV. 2301 (1989):

\[^{44}\]Legal requirements limited injured consumers to suits against retailers under the implied warranty of merchantability. Consumer suits against manufacturers were constrained either because the consumer was not in privity with the manufacturer or because the manufacturer's express warranty (the existence of which was typically sufficient to create privity) explicitly excluded coverage of consequential personal injury damages.

\[^{45}\]Id. at 2305. There were also “notice” requirements constraining the ability of injured consumers to sue manufacturers. Id.; see EDWARD H. LEVI, AN INTRODUCTION TO LEGAL REASONING 11-27 (1962).

\[^{46}\]10 M. & W. 109, 116, 152 Eng. Rep. 402, 405 (1842). Grant Gilmore later described historical contract theory: “The theory seems to have been dedicated to the proposition that, ideally, no one should be liable to anyone for anything.” GRANT GILMORE, THE DEATH OF CONTRACT 14 (1974).
tury ago can thus be characterized as an absolute consumer liability standard mutable by contract (Box 1 of the Products Liability Matrix).

In 1916, Judge Cardozo mounted a landmark assault upon the privity rule. In *MacPherson v. Buick Motor Co.*, the New York Court of Appeals held Buick Motor Company liable for injuries to the plaintiff, MacPherson, whose car had collapsed because of defective wooden wheels. MacPherson had purchased his car from a dealer rather than directly from Buick.

*MacPherson* was important in two respects. First, it dealt a serious blow to the privity rule by allowing a person other than the immediate purchaser to recover from a manufacturer. According to Cardozo, "[t]here is nothing anomalous in a rule which imposes upon A., who has contracted with B., a duty to C. and D. and others according as he knows or does not know that the subject-matter of the contract is intended for their use." Second, it moved the liability standard away from absolute consumer liability toward negligence by significantly expanding the application of the negligence standard beyond only those cases that involved "imminently dangerous" products.

The new standard remained mutable by contract, however, at least as it applied to purchasers. Thus, *MacPherson* can be understood as simply a change in the liability standard. Before *MacPherson*, manufacturers were generally not liable for negligence unless they opted out of the liability standard by expressly assuming liability through product warranties. After *MacPherson*, if manufacturers did not disclaim liability in their warranties, they could be liable for negligence. In Cardozo's words: "We have put aside the notion that the duty to safeguard life and limb, when the consequences of negligence may be foreseen, grows out of contract and nothing else. We have put the source of the obligation where it ought to be. We have put its source in the}

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45. We have found no examples of manufacturers contracting around that default. See also infra notes 183, 190 and accompanying text.
46. 111 N.E. 1050 (N.Y. 1916).
47. 111 N.E. at 1051.
48. 111 N.E. at 1053.
49. 111 N.E. at 1054.
50. 111 N.E. at 1052. Judge Cardozo cited a line of cases to which he offered *MacPherson* as an "extension": Statler v. George A. Ray Mfg. Co., 88 N.E. 1063 (N.Y. 1909); Devlin v. Smith, 89 N.Y. 470 (1882); Thomas v. Winchester, 6 N.Y. 397 (1852). Those rulings had employed a negligence standard when the purchaser had been injured by an "imminently dangerous" product. *MacPherson* held that the liability standard would not be limited to "imminently dangerous" products but applied whenever "the nature of a [product] is such that it is reasonably certain to place life and limb in peril when negligently made." *MacPherson*, 111 N.E. at 1053 (emphasis added).
law.” MacPherson thus shifted the products liability regime toward Box 3 of the Products Liability Matrix.

But MacPherson was only the beginning. In 1944, Justice Traynor prepared the way for a shift from Box 3 to Box 5 in his prescient concurrence in Escola v. Coca Cola Bottling Co. In that case, waitress Gladys Escola was seriously injured when a bottle she was putting into a refrigerator exploded in her hand. The Supreme Court of California affirmed the trial court's judgment in favor of Ms. Escola, based on the doctrine of res ipsa loquitur. Because defendant Coca-Cola Bottling Company had exclusive control of the object, and because the accident was "of such a nature that it ordinarily would not occur in the absence of negligence by the defendant," the Court held that res ipsa loquitur was properly applied.

Justice Traynor urged a different route. Citing MacPherson, and advocating its expansion, Traynor wrote:

I believe the manufacturer's negligence should no longer be singled out as the basis of a plaintiff's right to recover in cases like the present one. In my opinion it should now be recognized that a manufacturer incurs an absolute liability when an article that he has placed on the market, knowing that it is to be used without inspection, proves to have a defect that causes injury to human beings. Justice Traynor argued in favor of "absolute" liability — that is, of holding manufacturers of consumer goods "responsible for their qual-

51. 111 N.E. at 1053.
52. 150 P.2d 436 (Cal. 1944).
53. The application of the doctrine of res ipsa loquitur ("the thing speaks for itself") did not mean that manufacturers would be liable for an accident regardless of whether they had taken due care. Rather, it meant that the victim did not have the burden of proving that the manufacturer had not taken due care. In effect, a product-caused injury was deemed to be prima facie evidence of negligence where negligence would have been difficult for the victim to prove, and the manufacturer had the burden of proving that there was no negligence. See generally Henderson & Twerkski, supra note 42, at 18; Fleming James, Jr., Proof of Breach in Negligence Cases, 37 Va. L. Rev. 179 (1951); Page Keeton, Products Liability — Proof of the Manufacturer's Negligence, 49 Va. L. Rev. 675 (1963). Of course, when the manufacturer cannot cost-justifiably prove that it took due care, this doctrine is equivalent in effect to the absolute manufacturer liability standard. But, likewise, where the doctrine of res ipsa loquitur is not applied, proving that a manufacturer was negligent may be cost-prohibitive for an injured consumer — in which case the negligence standard is equivalent in effect to an absolute consumer liability standard. The question of who has the burden of proof is clearly very important (indeed, potentially outcome-determinative), but it must be separated from the issue of what the underlying liability standard is. This article focuses on the latter.
54. 150 P.2d at 438.
55. 150 P.2d at 442 (Traynor, J., concurring) ("[MacPherson] paves the way for a standard of liability that would make the manufacturer guarantee the safety of his product even when there is no negligence.").
56. 150 P.2d at 440 (Traynor, J., concurring).
57. Traynor did not use absolute liability in the same way the term is used in this article. He explicitly excluded from the scope of manufacturer liability accidents that did not occur in the course of a product's "normal and proper use." 150 P.2d at 444 (Traynor, J., concurring).
ity regardless of negligence” — on the ground that public policy demanded it, inasmuch as consumers were uninformed of product risks. Such responsibility was rooted in manufacturers’ implied warranty of fitness for proposed use and merchantable quality, a warranty not grounded in contract but rather implied by law. Thus, what Traynor was advocating was strict liability — a shift down into Row 3. But he was to wait another decade and a half.

The shift Traynor called for came in 1960, in *Henningsen v. Bloomfield Motors*. Clause Henningsen bought a Chrysler Plymouth from dealer Bloomfield Motors as a Mother’s Day present for his wife, Helen. Ten days later, while Helen Henningsen was driving her new Plymouth, something went wrong with the steering gear and the car made a sharp right turn into a wall, injuring her. The Henningsens sued and recovered both from Bloomfield Motors and from Chrysler.

Whereas *MacPherson* had dealt privity a serious blow by allowing someone other than the immediate purchaser to recover against the manufacturer, *Henningsen* razed the privity of contract requirement altogether by allowing a direct buyer or subsequent purchaser to recover from both the manufacturer and the dealer. But doing away with the privity requirement was only the second most important development that *Henningsen* brought about. More important, the *Henningsen* court decided that an implied warranty of merchantability could not be contracted around by an express warranty that purported to override any other express or implied warranties. The court refused to enforce such a provision, stating that, with respect to “disclaimers or limitations of the obligations that normally attend a sale, it

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58. 150 P.2d at 441 (Traynor, J., concurring) (emphasis added).
59. See infra text accompanying note 90.
60. See 150 P.2d at 442 (Traynor, J., concurring) (citations omitted) (“This warranty is not necessarily a contractual one, for public policy requires that the buyer be insured at the seller’s expense against injury.”).
61. Traynor did not address whether Coca-Cola Bottling could contract around liability — that is, whether the liability standard was mutable.
63. 161 A.2d at 99-100; see also William L. Prosser, *The Fall of the Citadel (Strict Liability to the Consumer)*, 50 MINN. L. REV. 791 (1966). Dean Prosser attributed “the fall of the citadel of privity” to *Henningsen*:
[T]he date of the fall of the citadel of privity can be fixed with some certainty. It was May 9, 1960, when the Supreme Court of New Jersey announced the decision in *Henningsen* v. Bloomfield Motors, Inc. The leaguer had been an epic one of more than fifty years. The sister fortress of negligence liability had fallen, after an equally prolonged defense, in 1916. *Id.* at 791.
64. The purchase order Mr. Henningsen signed contained the following sentence: “It is expressly agreed that there are no warranties, express or limited, made by either the dealer or the manufacturer on the motor vehicle, chassis, [or] parts furnished hereunder except as follows.” 161 A.2d at 74. The sentence was in fine print. 161 A.2d at 74.
seems sufficient at this juncture to say that they are not favored.”\textsuperscript{65} Thus, the liability standard allocating product risks was immutable—a matter not of contract, but of tort. Because Chrysler’s liability was strict, not dependent upon a showing of manufacturer negligence,\textsuperscript{66} \textit{Henningsen} in effect moved products liability law to Box 6 of the Products Liability Matrix.

A short time later, in 1963, Justice Traynor in \textit{Greenman v. Yuba Power Products, Inc.}\textsuperscript{67} confirmed the trend that he, Judge Cardozo, and the New Jersey Supreme Court had started.\textsuperscript{68} \textit{Greenman} involved a suit against the manufacturer of a home power tool. In 1955 William Greenman received as a Christmas gift from his wife a “Shopsmith”—a combination power tool that, with the proper attachments, could be used as a saw, drill, and wood lathe. In 1957, Mr. Greenman bought the attachments necessary to use the tool as a lathe. While he was working on a piece of wood with those attachments, the wood flew out of the machine and hit him in the head, injuring him seriously, whereupon he brought suit against the retailer and the manufacturer, Yuba Power Co. Following a jury verdict against Yuba, the manufacturer appealed to the California Supreme Court.

In an opinion by Justice Traynor, the California Supreme Court affirmed a jury verdict against both the retailer and the manufacturer. Citing \textit{Esco/a}, \textit{Henningsen}, and a host of products liability cases in which he said strict liability had been extended beyond food products to apply to manufacturers of other consumer goods, Traynor stated that the court “need not recanvass the reasons for imposing strict liability on the manufacturer [because] [t]hey have been fully articulated in the [cited] cases.”\textsuperscript{69} Beyond simply adopting strict liability as the

\textsuperscript{65} 161 A.2d at 77-78.

\textsuperscript{66} 161 A.2d at 77 (“Recovery of damages does not depend upon proof of negligence or knowledge of the defect.”).

\textsuperscript{67} 377 P.2d 897 (Cal. 1963).

\textsuperscript{68} Prosser later called \textit{Greenman}, “along with the \textit{Henningsen} case, one of the twin landmarks” of the strict liability revolution, Prosser, supra note 63, at 803, while Dean Wade called it the “leading case” imposing strict liability. John W. Wade, \textit{Strict Tort Liability of Manufacturers}, 19 Sw. L.J. 5, 9 (1965).

\textsuperscript{69} \textit{Greenman}, 377 P.2d at 901. Shortly after \textit{Greenman}, Justice Traynor explained more fully what he considered the bases for expanding manufacturer liability: (1) lack of consumer information about product defects, (2) loss spreading, and (3) the difficulty of determining which injuries are attributable to product defects. Roger J. Traynor, \textit{The Ways and Meanings of Defective Products and Strict Liability}, 32 Tenn. L. Rev. 363 (1965). The third basis is equivalent to the justification used for the adoption of \textit{res ipsa loquitur}. \textit{See supra} note 53. That is, given the proof problems and the likelihood that the manufacturer was negligent anyway, to dispense with proof of defect by simply making the manufacturer liable is less costly overall.
applicable liability standard, Traynor further held that this standard was now immutable:

Although in these cases strict liability has usually been based on the theory of an express or implied warranty running from the manufacturer to the plaintiff, the abandonment of the requirement of a contract between them, the recognition that the liability is not assumed by agreement but imposed by law, and the refusal to permit the manufacturer to define the scope of its own responsibility for defective products make clear that the liability is not one governed by the law of contract warranties but by the law of strict liability in tort. Accordingly, rules defining and governing warranties that were developed to meet the needs of commercial transactions cannot properly be invoked to govern the manufacturer's liability to those injured by their defective products unless those rules also serve the purposes for which such liability is imposed.70

Whereas Henningsen marked the law's arrival at Box 6, Greenman anchored it there.

Soon after Greenman, the American Law Institute (ALI) promulgated the Restatement (Second) of Torts.71 Section 402A of the Second Restatement set forth the new strict liability doctrine.72 Section 402A both reflected and reinforced changes that had been taking place on a somewhat piecemeal basis.73 Although understanding the exact scope of section 402A has proved difficult,74 the section can fairly be placed

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70. 377 P.2d at 901 (citations omitted); see also 377 P.2d at 901 ("Sales warranties serve ["to insure that the costs of injuries resulting from defective products are borne by the manufacturers that put such products on the market rather than by the injured persons who are powerless to protect themselves"]... fitfully at best.").

71. The Second Restatement was published in 1965, two years after Greenman. As a member of the ALI, Justice Traynor likely had seen drafts of what was to come.

72. § 402A. Special Liability of Seller of Product for Physical Harm to User or Consumer. (1) One who sells any product in a defective condition unreasonably dangerous to the user or consumer or to his property is subject to liability for physical harm thereby caused to the ultimate user or consumer, or to his property, if

(a) the seller is engaged in the business of selling such a product, and

(b) it is expected to and does reach the user or consumer without substantial change in the condition in which it is sold.

(2) The rule stated in Subsection (1) applies although

(a) the seller has exercised all possible care in the preparation and sale of his product, and

(b) the user or consumer has not bought the product from or entered into any contractual relation with the seller.

ReSTATEMENT (SECOND) OF TORTS § 402A (1965).

73. But see Priest, supra note 37, at 512-17 (arguing that any changes were minor and vastly overstated by William Prosser, the Reporter for the Restatement, in order to convince members of the American Law Institute to adopt section 402A).

74. See Page Keeton, Product Liability and the Meaning of Defect, 5 St. Mary's L.J. 30 (1973) (arguing that § 402A provides a nebulous test); Joseph A. Page, Generic Product Risks: The Case Against Comment k and for Strict Tort Liability, 58 N.Y.U. L. Rev. 853 (1983) (arguing that the intent behind § 402A and its comments is unclear and should not be given dispositive weight in determining liability); Priest, supra note 37, at 521 (arguing that text of § 402A decided few cases and that its explanatory comments proved vague); Dominick Vetri, Legislative Codification of Strict Products Liability Law in Oregon, 59 Or. L. Rev. 363, 366 (1981) ("To call section 402A ambiguous is almost too kind."). But cf. John Wade, On the Nature of Strict Tort
in Boxes 4 and 6 of the Products Liability Matrix. According to the express terms of 402A, a manufacturer of an *unreasonably dangerous* product will be held liable for injuries caused by its product whether or not the manufacturer was negligent — that is, even if “the seller has exercised all possible care in the preparation and sale of his product.”75 Nevertheless, the fact that the product must be “unreasonably dangerous” or “defective” reveals that the product must meet some standard that, in effect, may be equivalent to holding the manufacturer to a negligence standard.76 In any case, section 402A does not extend to Box 8 — absolute manufacturer liability. The rule articulated in section 402A was not meant to hold manufacturers liable for injuries from products that are well known to be dangerous, such as “good whiskey.”77 Nor were manufacturers to be liable for injuries caused by products that are “unavoidably unsafe”78 or for injuries resulting from products posing dangerous risks where consumers are “warn[ed] against them.”79

Indeed, while the classic cases such as *Esco*, *Henningsen*, and *Greenman*, as well as section 402A, did much to move manufacturer liability away from the absolute consumer liability regime of *Winterbottom*, the products liability revolution stopped well short of absolute liability.80 As Traynor explained in 1965:

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Liability for Products, 44 Miss. L.J. 825, 830 (1973). Wade argues that what § 402A and its comments seek to convey with the terms “defective” and “unreasonably dangerous” is that the product must be harmful or unsafe because of something wrong with it. The "something wrong" may have come about quite unintentionally because of a miscarriage in the manufacturing process, so that the product was not what it was intended to be; it may, on the other hand, have come about, even though the product was exactly as it was intended to be, because of a poor design . . . .

Id. at 830.

75. Restatement (Second) of Torts § 402A (1965).


77. Restatement (Second) of Torts § 402A cmt. i (1965); see Continuation of Discussion of the Restatement of the Law, Second, Torts, 38 A.L.I. Proc. 87-88 (1961); Prosser, supra note 63, at 807-11 (explaining intent of drafters); Wade, supra note 74, at 830-31 (same).

78. Restatement (Second) of Torts § 402A cmt. k (1965).

79. Restatement (Second) of Torts § 402A cmt. j (1965).

80. Much of the expansion occurred not in the substantive standard but in the types of defects to which the standard was applied. Courts in the 1970s expanded the concept of defect to include, in addition to manufacturing defects, design and warning defects. See generally Priest, supra note 43. Note that insofar as courts hold some manufacturers liable for failure to provide adequate warning even where the product is not in a defective condition and even where the injured consumer was careless in handling the product, the liability standard can be characterized as absolute liability that is mutable (Box 7). Manufacturers can contract out of liability by providing an adequate warning. Cf. infra text accompanying notes 222-31 (describing Landes and Posner’s view of warnings as implied disclaimers).
It should be clear that the manufacturer is not an insurer for all injuries caused by his products. A bottling company is liable for the injury caused by a decomposing mouse found in its bottle. It is not liable for whatever harm results to the consumer's teeth from the sugar in its beverage. A knife manufacturer is not liable when the user cuts himself with one of its knives. When the injury is in no way attributable to a defect there is no basis for strict liability.\textsuperscript{81}

Dean Wade made the same basic observation: "Strict products liability clearly does not require a perfectly safe product. A simple instrument like a hammer, for example, will not infrequently smash a finger or thumb if used unskilfully. It could probably be designed to make this possibility less likely, but at the cost of impairing its usefulness."\textsuperscript{82}

In short, the early years of the products liability revolution moved the law from Box 1 to Boxes 4 and 6 without moving it all the way to Box 8.\textsuperscript{83} More recently, the expansion toward Box 8 has ceased. Indeed,

\textsuperscript{81} Traynor, \textit{supra} note 69, at 366-67.

\textsuperscript{82} Wade, \textit{supra} note 68, at 16 (footnote omitted).

\textsuperscript{83} However, some more recent cases might be said to constitute the products liability revolution's last offensive, pushing the law yet closer to Row 4. Whereas Row 3 places liability upon consumers for residually preventable accidents, these cases hold manufacturers liable for injuries even where plaintiffs were determined to be contributorily negligent — that is, injuries from accidents that may have been residually preventable.

McCown v. International Harvester Co., 342 A.2d 381 (Pa. 1975), is one example. In McCown, the court disallowed a contributory negligence defense against a strict liability claim. Relying on § 402A, the Pennsylvania Supreme Court reasoned that manufacturers make better insurers of the costs of accidents, perhaps even residually preventable:

> The strict liability of Section 402A is founded in part upon the belief that as between the sellers of products and those who use them, the former are the better able to bear the losses caused by defects in the products involved. This greater loss-bearing capacity is unrelated to negligence in the manufacture or marketing of products. Indeed, retail and wholesale sellers of chattels are themselves often in no position to discover or avoid defects in their inventories, even by the exercise of a high degree of care. Thus, defendants in Section 402A actions are subjected to liability without fault. It is a proper corollary to this principle that the lesser loss-bearing capacity of product users exists independently of their negligence or lack of it.

342 A.2d at 383 (Pomeroy, J., concurring) (citations omitted) (emphasis added). Applying this reasoning, the \textit{McCown} court held International Harvester strictly liable for injuries caused by a "defectively" designed steering mechanism on the company's tractor, where plaintiff's negligent driving of his tractor into a guardrail caused the steering wheel to spin rapidly. The court required not simply that a product cause an injury but that a defective product cause it, though the court's use of the term is unclear. Thus, the \textit{McCown} standard cannot necessarily be characterized as absolute manufacturer liability. Nevertheless, \textit{McCown} is significant in that the court allocated to the manufacturer the costs of a product accident even though those costs might well have been residually preventable, in which case under the strict liability standard they should have been allocated to consumers.

A few courts have similarly pushed the law toward, but not squarely into, Row 4 by holding manufacturers strictly liable for their products even where the accident might have been residually preventable. \textit{See}, e.g., Bell v. Jet Wheel Blast, 462 So. 2d 166, 171-72 (La. 1985) ("The contributory negligence defense would permit the manufacturer to breach his duty to manufacture a reasonably safe product and escape liability simply because the fault of the user of the defective product contributed to the accident."); \textit{see also} Murray v. Fairbanks Morse, 610 F.2d 149 (3d Cir. 1979) (applying § 402A to disallow contributory negligence defense to strict liability); Moran v. Raymond Corp., 484 F.2d 1008 (7th Cir. 1973) (finding contributory negligence not a bar to recovery from manufacturer under strict liability), \textit{cert. denied}, 415 U.S. 932 (1974);
there is evidence that the tide has turned — that, at the urging of contemporary scholars, courts have shifted the liability standard back toward negligence.84

Table 2 summarizes the evolution of products liability law by locating the discussed cases in the Products Liability Matrix.

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Green v. Sterling Extruder Corp., 471 A.2d 15 (N.J. 1984) (holding contributory negligence not a defense to strict liability action). These courts may simply be taking the position that, where an accident is preventable by both the consumer and the manufacturer and where the court cannot easily determine whether the accident was initially or residually preventable, the court will assume that the accident was initially preventable.

84. See, e.g., Henderson & Eisenberg, supra note 5.
### TABLE 2
THE PRODUCTS LIABILITY MATRIX
THE EVOLUTION OF PRODUCTS LIABILITY LAW

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<tr>
<th>DEGREE OF MUTABILITY</th>
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<th>(Box 2)</th>
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<td>§ 402A (1965)</td>
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<tr>
<td>Absolute Manufacturer Liability</td>
<td>§ 402A (1965)</td>
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</tbody>
</table>
Not surprisingly, shifts in the law brought about by cases such as *Escola*, *Henningsen*, and *Greenman* attracted considerable attention. For instance, the following appeared in 1963 in a national newspaper article:

In earlier, simpler times when a man bought a horse he was apt to look at the animal's teeth, trot him around a field, and put his money on the barrel head, mindful of the age-old doctrine of *caveat emptor*, "let the buyer beware." If the horse proved to be a chronic stumbler and the owner was thrown and severely injured, well, too bad. The buyer should have discovered that for himself before closing the deal.

*Caveat emptor* is far from dead, but since about 1915 the tide of the law has been shifting heavily toward protection of the buyer or "consumer" . . . it's now the manufacturer who'd better beware if his products prove defective. He'll be sued — hard. 85

As section II.B below discusses, the scholarly commentators of the *Henningsen* decade welcomed the trend toward caveat vendor: let the seller beware.

To round out the history of products liability and, more importantly, to provide a backdrop for the current debate — for much of the current scholarship explicitly rejects the arguments that justified the movement through the Matrix 86 — it is necessary to consider briefly the original justifications for expanded manufacturer liability.

**B. The First Generation's Case for Enterprise Liability**

The first generation of products liability judges and scholars believed that an immutable strict liability standard would overcome what they perceived as undesirable features of consumer product markets. Three principal justifications propelled the expansion of manufacturer liability outlined in the cases discussed above: imperfect consumer information, exploitative manufacturer market power, and risk distribution. 87


86. See infra section III.B.1.

87. Because the first generation's arguments were, by the standards of contemporary economic analysis, overlapping and even muddled, it is possible to organize them in more than one way. Priest organizes the justifications for expanded manufacturer liability into three main categories partly different from those above. See Priest, supra note 37, at 520. Schwartz organizes the justifications for strict liability into six basic assumptions. See Alan Schwartz, *The Case Against Strict Liability*, 60 FORDHAM L. REV. 819, 821-22 (1992). This section presents what we consider to be the three principal justifications for expanded manufacturer liability, justifications that capture most if not all of the first generation's specific arguments and at which the present generation has taken aim.
1. Imperfect Consumer Information

The first generation justified the expansion of manufacturer liability in part on the ground that consumers lacked information about, and systematically underestimated, product risks. Consumers lacked adequate information about product risks, the first generation believed, in part because manufacturers, whose incentive was to foster consumer "optimism," actively misled them. In *Escola*, for example, Traynor justified strict liability partially on that ground:

The consumer no longer has means or skill enough to investigate for himself the soundness of a product, even when it is not contained in a sealed package, and his erstwhile vigilance has been lulled by the steady efforts of manufacturers to build up confidence by advertising and marketing devices such as trade-marks.

In the unregulated market, consumers lulled by manufacturers' ploys could not make well-informed purchasing decisions.

The *Henningsen* court gave even greater emphasis to this aspect of consumer product markets: "[A] modern manufacturer . . . not only processes [its product] and dresses it up so as to make it appear appetizing, but he uses the newspapers, magazines, billboards, and the radio to build up the psychology to buy and consume his products." Moreover: "Under modern conditions the ordinary layman, on responding to the importuning of colorful advertising, has neither the opportunity nor the capacity to inspect or to determine the fitness of an automobile for use; he must rely on the manufacturer who had control of its construction." Like Traynor, the *Henningsen* court believed both that consumers lacked the information required to make well-informed consumption choices and that manufacturers exacerbated the lack of information with advertising and marketing techniques designed to lure consumers without informing them.

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91. *Henningsen*, 161 A.2d at 82; see also 161 A.2d at 84 ("Judicial notice may be taken of the fact that automobile manufacturers, including Chrysler Corporation, undertake large scale advertising programs over television, radio, in newspapers, magazines and all media of communication in order to persuade the public to buy their products."); 161 A.2d at 73-74 (noting small print used for parts of purchase order executed by Claus Henningsen).

92. 161 A.2d at 83.
Holding manufacturers liable for product injuries would solve this information problem, the first generation thought, by forcing manufacturers to provide greater safety and to be more forthcoming about product risks. Because manufacturers would have to pay for accidents caused by their defective products, manufacturers would be unable to profit from consumer ignorance. Consequently, uninformed consumers forced to "rely on the manufacturer" to make all cost-justified safety investments in the design and construction of its products would receive the benefit of safer products.

2. Exploitative Manufacturer Market Power

Manufacturers' seemingly overwhelming market power over consumers provided the second principal justification for expanded manufacturer liability. Because "adhesive" contracts accompanied consumer products, the first generation believed that manufacturers exploited consumers by writing contract (warranty or disclaimer) provisions that were unfavorable to consumers and by disclaiming liability for inefficiently unsafe products.

According to Professor Priest, the ascent of the theory of exploitative contracts is attributable almost exclusively to the scholarship of Friedrich Kessler. In his classic "Contract of Adhesion" article, Kessler indicted the increasingly widespread use of standardized contracts:

> Standard contracts are typically used by enterprises with strong bargaining power. The weaker party, in need of the goods or services, is frequently not in a position to shop around for better terms, either because the author of the standard contract has a monopoly (natural or artificial) or because all competitors use the same clauses. His contractual intention is but a subjection more or less voluntary to terms dictated by the stronger party, terms whose consequences are often understood only in a vague way, if at all. Thus, standardized contracts are frequently contracts of adhesion . . . .

Although Kessler did not address products liability specifically, the

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94. See Priest, supra note 12, at 1297 ("The view of the warranty as an exploitative device has provided crucial support to the policy of enterprise liability and the replacement of contract principles with tort principles in product defect cases."); id. at 1302-03 n.37 (citing authorities); see also Schwartz, supra note 87, at 821-22.

95. Kessler, supra note 93.

96. Id. at 632; see also id. at 640 ("Freedom of contract enables enterprisers to legislate by contract . . . .").
first generation of products liability scholars and judges found Kessler's arguments relevant and persuasive. Priest explains:

[T]his narrative of Kessler's had tremendous influence on the success of enterprise liability. The narrative persuaded the courts that the nineteenth-century notion of independent and equal merchants had disappeared and had been replaced by a twentieth-century notion of product consumers who, because lacking in bargaining power, are uninformed, unable to influence manufacturer behavior, and thus totally dependent on courts for protection. It follows directly that nineteenth-century contract law must also be replaced with law more responsive to modern problems.97

Replacing outdated contract law was precisely what Kessler prescribed, and precisely what the first generation aimed to do.98

The Henning v. Bloomfield court, perhaps more than any other, emphasized the problem of consumer powerlessness. In an opinion epitomizing the first generation's perception of manufacturer market power, the Henning court observed:

The traditional contract is the result of free bargaining of parties who are brought together by the play of the market, and who meet each other on a footing of approximate economic equality. In such a society there is no danger that freedom of contract will be a threat to the social order as a whole. But in present-day commercial life the standardized mass contract has appeared. It is used primarily by enterprises with strong bargaining power and position.99

As Priest points out, the Henning court "cites Kessler extensively and excerpts large sections from Kessler's . . . work,"100 including his "Contracts of Adhesion" article.101 Borrowing from Kessler and ap-

97. Priest, supra note 37, at 494-95.
98. See, e.g., Greenman v. Yuba Power Prods., Inc., 377 P.2d 897, 901 (Cal. 1963) ("[The] rules defining and governing warranties that were developed to meet the needs of commercial transactions cannot properly be invoked to govern the manufacturer's liability to those injured by their defective products . . . .").
99. Henning v. Bloomfield Motors, 161 A.2d 69, 86 (N.J. 1960). For a variation of this story that contemplates collusion on the part of manufacturers, see 161 A.2d at 87 ("Because there is no competition among the motor vehicle manufacturers with respect to the scope of protection guaranteed to the buyer, there is no incentive on their part to stimulate good will in the field of public relations.").
100. Priest, supra note 37, at 509.

Heavily influenced by the "contract of adhesion" writing that dominated academic circles in the 1940s and 1950s, Henning concluded that private limitations on warranties served no useful social purpose, and were therefore an attempt by manufacturers to distance themselves from the harmful consequences of the defective products they had placed into the stream of commerce.

Id. at 2200-01 (footnote omitted).
pealing to "instinct," the *Henningsen* court painted a picture of "gross inequality of bargaining position" between consumers and manufacturers.\(^{103}\)

Here again, the first generation believed that increased manufacturer liability provided the solution. By moving out of the mutable dimension of products liability, manufacturers would no longer be able to exploit consumers by adding contract terms to product warranties that insulated them from liability. Nor could manufacturers simply disclaim liability for accidents caused by products that consumers demanded. Rather, the first generation thought that immutable strict liability would, in effect, put consumers on a bargaining par with manufacturers by prohibiting allocations of product risks to which only parties in inferior bargaining positions would agree.

3. **Risk Distribution**

The first generation also believed that leaving the burden of product accidents concentrated on the few unlucky consumers who happened to suffer product-caused accidents was both unfair and inefficient.\(^{104}\) Accordingly, as contemporary products liability scholars have observed, judges and scholars sought instead to spread those burdens across all consumers.\(^{105}\)

\(^{102}\). See *Henningsen*, 161 A.2d at 85 ("The language gave little and withdrew much... An instinctively felt sense of justice cries out against such a sharp bargain.").

\(^{103}\). 161 A.2d at 87; see also 161 A.2d at 95 ("grossly disproportionate bargaining power").

\(^{104}\). Whereas imperfect consumer information and manufacturer market power fit easily into the category of classic market failures, the absence of manufacturer-provided insurance against product accidents is not itself a market failure. Rather, the first generation more accurately characterized it as a possible symptom of the other two market failures: because ignorant consumers did not know to demand it, and exploitative manufacturers would not voluntarily supply it, manufacturer-provided insurance against product accidents was nonexistent. The absence of such insurance, therefore, evidenced the magnitude of the other market failures and, hence, the need for strict liability. As revealed by their heavy reliance on risk distribution concerns, see *infra* note 106 and accompanying text, the first generation apparently could not imagine that well-informed consumers and well-behaved manufacturers would exclude insurance for product injuries from their warranties, especially given that first-party health insurance was less common at the dawn of the strict liability revolution than it is today. See *Priest*, *supra* note 37, at 478, 479.

\(^{105}\). The first generation simply assumed that manufacturers were almost always in a superior position to take precautions, see generally *Priest*, *supra* note 37, so that distributing risks to them would have the benefit not only of avoiding concentrated risks but also of creating incentives for manufacturers to reduce accidents. See, e.g., *Escola v. Coca Cola Bottling Co.*, 150 P.2d 436 (Cal. 1944) (Traynor, J., concurring):

> Even if there is no negligence, however, public policy demands that responsibility be fixed wherever it will most effectively reduce the hazards to life and health inherent in defective products that reach the market. It is evident that the manufacturer can anticipate some hazards and guard against the recurrence of others, as the public cannot.

150 P.2d at 440-41. Manufacturers would prevent preventable accidents rather than raise their prices — and lose consumers — to cover the costs of inefficient damages. Although the assumption has not been completely discredited, see *Schwartz*, *supra* note 87, at 827 ("Manufacturers often, but not always, have a comparative advantage at producing safety."); the first generation's
Professor Priest, for example, attributes the expansion of manufacturer liability in large part to the first generation’s attempt to distribute risks.106 According to Priest, what Kessler did for the theory of exploitative contracts, Fleming James did for the theory of risk distribution:107 “James promoted one principle — risk distribution — above all others. . . . [He] devised a program of research that, over time, came to exert a cumulative influence on tort law thinking that made the risk distribution principle central to the enterprise liability synthesis of the mid-1960s.”108 James’ influence, according to Priest, was remarkable.109

Traynor’s Escola concurrence, which Priest characterizes as “the most prominent antecedent of our modern regime,”110 captures the first generation’s heavy reliance on risk distribution. Traynor wrote:

Those who suffer injury from defective products are unprepared to meet its consequences. The cost of an injury and the loss of time or health may be an overwhelming misfortune to the person injured, and a needless one, for the risk of injury can be insured by the manufacturer and distributed among the public as a cost of doing business. . . . Against such a risk there should be general and constant protection and the manufacturer is best situated to afford such protection.111

In Greenman, Traynor, citing James, again justified the shift to strict liability on risk-distribution grounds. “The purpose of [strict] liability is to insure that the costs of injuries resulting from defective products are borne by the manufacturers that put such products on the market.
rather than by the injured persons who are powerless to protect themselves."\textsuperscript{112} The court in \textit{Henningsen} reasoned similarly.\textsuperscript{113}

Applying elementary insurance principles, the first generation reasoned that manufacturers should be strictly liable for the costs of product injuries. Holding manufacturers liable for the cost of accidents, they argued, would force manufacturers to spread accident costs thinly across the entire population of consumers, where costs could be borne more easily. In this way, manufacturer liability provided a form of insurance not otherwise available to many consumers.\textsuperscript{114}

Together, imperfect consumer information, exploitative manufacturer market power, and risk distribution went far to legitimate the shift toward enterprise liability. As Priest explains:

The true foundation for the strict liability standard was . . . the accumulated effect of thirty years of scholarship that had created a consensus about the relatively inferior bargaining power of consumers, the importance of [overcoming the problem of imperfect information by] internalizing costs to manufacturers, and the benefits of spreading risks broadly through manufacturer insurance. These propositions at the time were uncontroversial, and enterprise liability follows inescapably from them.\textsuperscript{115}

Several others among the present generation of products scholars also have recognized that the inevitable conclusion of the first generation's premises was expanded manufacturer liability.\textsuperscript{116} The problem, many now argue, is that those premises were false. Many of the present generation of product scholars argue, in other words, that the first generation's arguments were valid but not sound. Part III turns to the contractarians' rebuttal.

\begin{itemize}
\item[112.] Greenman v. Yuba Power Prods., Inc., 377 P.2d 897, 901 (Cal. 1963) (citing, inter alia, 2 FOWLER V. HARPER & FLEMING JAMES, JR., \textsc{The Law of Torts} §§ 28.15-28.16, at 1569-74 (1966)).
\item[113.] "[The consumer] has the least individual ability to bear the[ ] disastrous consequences [of product failure]." Henningsen v. Bloomfield Motors, 161 A.2d 69, 87 (N.J. 1960) (quoting LAWRENCE VOLD, \textsc{The Law of Sales} 447 (2d ed. 1959)).
\item[114.] See Priest, \textit{supra} note 37, at 478-80.
\item[115.] \textit{Id.} at 517. As comment c of section 402A makes clear, the ALI's preference for the expanded standard was motivated by all three of these considerations. In language almost echoing Traynor, the drafters of section 402A explained that

the public has the right to and does expect, in the case of products which it needs and for which it is forced to rely upon the seller, that reputable sellers will stand behind their goods; that public policy demands that the burden of accidental injuries caused by products . . . be treated as a cost of production against which liability insurance can be obtained; and that the consumer of such products is entitled to the maximum of protection at the hands of someone, and the proper persons to afford it are those who market the products.

\textsc{Restatement (Second) of Torts} § 402A cmt. c (1965).
\item[116.] \textit{See infra} note 353 and accompanying text.
\end{itemize}
III. THE CURRENT PRODUCTS LIABILITY DEBATE

Using the foundation provided in Parts I and II, this Part critically analyzes the current products liability debate. Section III.A sets forth the contractarians' arguments that the current products liability regime, like the "first generation" of products liability scholarship that helped create it, is based on a set of false assumptions. Section III.B shows how the positions that contractarians take on one dimension of the Products Liability Matrix do not square with the positions they take on the other. Section III.C scrutinizes the arguments proffered by the regulators. It shows that the regulators at times seem dubious of their central assumption that markets fail, calling into question their justification for regulation in the first place. Finally, section III.D steps back to consider the debate taken as a whole, and concludes that, owing to uncertainty about whether and how consumer product markets fail, the debate has been largely unilluminating.

A. Introduction to the Debate: The Consumer Sovereignty Norm

Legal economists presently engaged in the products liability debate all seem to adopt, in one form or another, the "consumer sovereignty norm," which holds "that the law should reflect the preferences of competent, informed consumers regarding risk allocation."117 The preferences of informed, competent consumers cannot be assessed in a laboratory, however, so legal economists have relied on either or both of two imperfect methods. Some scholars have observed real-world markets where consumers are thought to reveal their preferences. Unfortunately, this method requires data that are often unavailable and, moreover, depends on there being no significant market imperfections that might distort the market and, in effect, conceal consumer preferences. Alternatively, some legal economists have turned to theoretical models, which can be helpful in predicting consumer behavior under

117. Schwartz, supra note 7, at 355; see also W. KIP VISCUSI, REFORMING PRODUCTS LIABILITY 2 (1991) ("Ideally, the social value placed on risk reductions should reflect the value of these improvements to those who will be protected."); id. at 66 ("The purpose of products liability is to fill the gaps left by market imperfections and to replicate the incentives that would have been generated had markets been functioning perfectly."); Ayres & Gertner, supra note 15, at 89-91; Priest, supra note 29, at 6 ("tort liability can enhance consumer welfare if it is directed in an informed manner"); Session One: Discussion of Paper by Richard Epstein, 10 CARDOZO L. REV. 2227, 2238 (1989) (lawmakers should "figure out what people do in ordinary commerce and imitate it") (statement of Richard Epstein) [hereinafter Session One]. A majoritarian view seems implicit: to the extent that the preferences of informed consumer regarding risk allocation may vary, a possibility that none of these scholars considers, scholars would probably want a rule that appealed to the broadest number of such consumers. Cf. Robert E. Scott, A Relational Theory of Default Rules for Commercial Contracts, 19 J. LEGAL STUD. 597, 607-08 (1990) (justifying majoritarian versus individualized default rules).
different conditions.\textsuperscript{118} Under either or both methods, scholars employ the consumer sovereignty norm to locate what they believe to be the optimal liability standard — the standard that competent, informed consumers would most prefer. On that issue, as discussed below, scholars have reached a variety of conclusions. But, as Professor Richard Epstein has observed, "[f]or a wide range of products, the larger battle is not over [liability standards] but over the right to contract out of them."\textsuperscript{119} In this larger battle, scholars divide into two main camps: the contractarians and the regulators.

The contractarians believe that there are no significant impediments to optimal contracting between consumers and manufacturers in product markets.\textsuperscript{120} That view implies that the products liability standard should be mutable — in other words, products liability law should be treated more like contract law and less like tort law. Epstein's view epitomizes the contractarians' position:

The modern faith in regulation should not . . . be allowed to obscure the strong impact of market incentives. Each firm when acting in its own self-interest will improve safety levels even in the absence of exposure to products liability suits. . . . Complacent firms run the risk of displacement and bankruptcy at the hands of competitors who provide better and safer products to their customers. . . . Individual parties, firms, and unions all have sufficient competence that it is unlikely that they will patiently tolerate institutional arrangements that do not minimize the various costs associated with product-related accidents.\textsuperscript{121}

Expressly challenging those who would regulate the allocation of product risks, the contractarians counsel reliance on market forces to satisfy the consumer sovereignty norm.

The regulators, in contrast, are skeptical of the market's ability to satisfy the deterrence and insurance goals of products liability law. Thus, they imply that consumer product markets should be regulated — whether by tort or other regulatory institutions. While these legal

\textsuperscript{118} See, e.g., Priest, supra note 12, at 1307-08 (developing theory of warranties by imagining "that all products are manufactured under conditions of perfect competition, so that each characteristic of a product — including warranty terms — serves to optimize the welfare of some dominant class of consumers," and then asking, "What would be the terms of product warranties?"); Schwartz, supra note 7, at 356. See generally Jason S. Johnston, Law, Economics, and Post-Realist Explanation, 24 LAW & SOCY. REV. 1217, 1228-29 (1990) (book review) (describing the "model of precautions" which most legal economists adopt in some form).

\textsuperscript{119} Epstein, supra note 101, at 2204. A very similar debate is taking place in corporate law. See Black, supra note 15, at 543 ("A central debate in corporate law concerns whether virtually all of corporate law should be waivable by contract among the relevant parties, or whether some rules should be nonwaivable, and if so, which ones."); id. at 549-50 (describing the various views taken by corporate law scholars).

\textsuperscript{120} See infra section III.B.1.

\textsuperscript{121} Epstein, supra note 10, at 89-90.
economists generally might prefer freedom of contract,\textsuperscript{122} they make
an exception in this context because they believe that one or more im­
perfections in consumer product markets render consumer-manufac­
turer contracts inefficient.\textsuperscript{123} That is, the regulators’ position rests on
the assumption that an unfettered market generates avoidable ineffi­
cien­cies and thus does not satisfy the consumer sovereignty norm.
They therefore seek to regulate the allocation of product risks by one
or both of two means — common law liability rules and public law
administrative regulations.\textsuperscript{124}

Influential representatives from these two main camps are consid­
ered in turn.

B. The Contractarians: Faith in Market Forces

1. The Counterrevolution

To endorse freedom of contract, the contractarians have had to
explain why none of the original arguments justifying the trend toward
enterprise liability withstand close scrutiny. In light of the first gener­
ation’s endorsements of the common law developments highlighted in
Part II, scholars advocating a return to contract often complain that
the tide against them seems irreversible. As Professor Schwartz ex­
plains, “complete reversion to a regime of freedom of contract for
product-related risks may be a reform that history has foreclosed.”\textsuperscript{125}
Professor Epstein laments: “Contractual freedom is dead . . . .”\textsuperscript{126}
Peter Huber adds: “There [is] no doubt whatever about that. The

\textsuperscript{122} See, e.g., Alan Schwartz & Louis L. Wilde, Intervening in Markets on the Basis of Im­

\textsuperscript{123} See infra section III.C.1.

\textsuperscript{124} That is, the label regulators denotes not only those scholars who favor executive-branch
regulation, but also those who favor common law governance of product risk allocation. See
POSNER, supra note 10:

[Market failures] are conventionally viewed as failures of the market’s self-regulatory mech­
anisms and therefore as appropriate occasions for public regulation. But this way of looking
at the matter is misleading. The failure is ordinarily a failure of the market and of the rules
of the market prescribed by the common law. Pollution, for example, would not be consid­
ered a serious problem if the common law remedies, such as nuisance and trespass, were
efficient methods of minimizing the costs of pollution. The choice is rarely between a free
market and public regulation. It is between two methods of public control — the common
law system of privately enforced rights and the administrative system of direct public con­
trol — and should depend upon a weighing of their strengths and weaknesses in particular
contexts.

\textit{Id.} at 343; see also Geoffrey C. Hazard, Jr., \textit{The Role of the Legal System in Responses to Public
Regulatory Regime for Catastrophic Personal Injuries}, 13 J. LEGAL STUD. 417 (1984); Susan
Rose-Ackerman, \textit{Tort Law in the Regulatory State, in TORT LAW AND THE PUBLIC INTEREST,
supra note 14 (all stating that private law and public law are alternative means of regulation);
Schwartz, supra note 7, at 384 (using word “regulation” to include what courts and juries do).

\textsuperscript{125} Schwartz, supra note 7, at 356.

\textsuperscript{126} Epstein, supra note 101, at 2221; cf. HENDERSON & TWERSKI, supra note 42, at 109
register of its burial [was] signed by the clergyman, the clerk, the undertaker, and the chief mourner. In matters touching on health and safety, contract [is] dead as a doornail." 127 Finally, Professor Priest states:

This is the hardest problem for products liability now. It is going to require another revolution to come even close to market-oriented ideas. It is not an exaggeration to say that in most of these cases courts presume consumers are powerless to avoid the injury, powerless to choose the product, powerless even to appreciate what the risks are in advance. It is a profoundly antimarket, antifreedom approach. It really has to be overturned, but it will be very difficult to convince the courts. 128

These scholars overstate their obstacles. The products liability literature now contains a barrage of powerful criticisms of the first generation's arguments. By debunking the original justifications for strict liability, 129 contractarian reformers have acquired tremendous momentum. As one commentator observes: "[T]he critics of enterprise liability have turned the system's own premises against it. Tort law's new paradigm of social welfare has been turned into an indictment of tort law and a justification for abandoning the system." 130 In short, we appear to be on the verge of a counterrevolution in products liability if we are not already in the midst of one. 131

a. Imperfect consumer information. Some scholars now doubt that consumers systematically underestimate product risks. 132 Indeed,

129. See id. at 2330 ("My ambition . . . is not purely to get the record straight. I hope to delegitimize the regime by showing the mundane sources of the revolution. The revolution owed its origin to ideas that ought to be reconsidered. We [sh]ould reanalyze the principles, doctrines, and empirical assumptions that propelled the reformers.") (statement of George L. Priest).
130. Richard B. Stewart, Crisis in Tort Law? The Institutional Perspective, 54 U. CHI. L. REV. 184, 189 (1987); see also George L. Priest, The Best Evidence of the Effect of Products Liability Law on the Accident Rate: Reply, 91 YALE L.J. 1386 (1982): Upon closer view, a flat world becomes round, and the Martian canals are shown to be illusions. [The first generation's] ideas have dominated our thinking about contractual relations . . . between manufacturer and consumer, and have transformed the law of products liability. Unfortunately, the suppositions upon which their ideas are based are unsupported by the evidence. The time has come for a new view of the world. Id. at 1400 (footnote omitted); supra note 5 (outlining judicial and legislative efforts to return to more traditional products liability doctrines).
132. Cf. Priest, supra note 12, at 1298 ("However plausible this assumption as a general matter, consumer perceptions are very difficult to identify or to measure. As a consequence,
Epstein characterizes the imperfect-information argument as "flawed," "badly misguided," and "wholly misguided."\textsuperscript{133} Schwartz' critique\textsuperscript{134} of this once uncontroversial claim — the most complete and probably the most influential — charges that it lacks both empirical and theoretical support. Schwartz concedes that some consumer misperception of product risks is inevitable, but he denies that that fact justifies interfering with the market. In his view, "[t]he evidence fails to show that consumers misperceive risk levels to the extent that undesirable equilibria exist."\textsuperscript{135} Schwartz finds it intuitively plausible that consumers would wrongly estimate the expected costs of product-caused injuries, but not systematically. Individual estimates should be distributed normally about the true expected costs.\textsuperscript{136} According to Schwartz, if consumer estimates are unbiased in this way, manufacturers will behave as if all consumers are perfectly informed. That is, product and warranty quality will reflect the demand of the average consumer, who, by hypothesis, adds the appropriate risk premium to the product price. Furthermore, Schwartz and Wilde argue also that, even if the costs of information lead many consumers to ignore the terms in product warranties, so long as a critical mass of consumers — perhaps as few as thirty percent — is well informed, manufacturers will behave as though \textit{all} consumers are well informed.\textsuperscript{137} In essence, the investments of consumers who shop for warranties create a positive externality for other, not-so-well-informed consumers.\textsuperscript{138} Consequently, all consumers enjoy efficient warranties and optimally safe products.

\textbf{b. Exploitative market power.} Schwartz and Wilde have, on theoretical grounds, also challenged the assumption that manufacturers would exercise market power over consumers by reducing the quality of their products or warranties.\textsuperscript{139} Their basic argument is easily illustrated. Suppose Acme Incorporated is the only manufacturer of widgets and that, until today, widgets had sold for $100 apiece and had

\textsuperscript{133} Epstein, supra note 101, at 2204.
\textsuperscript{134} See generally Schwartz, supra note 7, at 374-84.
\textsuperscript{135} Id. at 379.
\textsuperscript{136} Id. at 375; Alan Schwartz, The Myth that Promisees Prefer Supracompensatory Remedies, 100 YALE L.J. 369, 394 (1990) ("[T]here is no reason to think that promisee errors are systematically high or low.").
\textsuperscript{138} See Schwartz & Wilde, supra note 137, at 1416-19.
\textsuperscript{139} Id. at 1402-20.
cost Acme $50 apiece to manufacture.\textsuperscript{140} Suppose further that today Acme discovered a safety device that could save the consumer $50 in expected accident costs per widget and that would cost Acme Incorporated only $20 per widget to produce.\textsuperscript{141} The \textit{Henningsen} court would have presumed that Acme — monopolist that it is — would not install the safety device even though doing so could yield a net savings to consumers of $30 per widget. But Schwartz and Wilde point out that this presumption has no economic basis. Acme could increase its profits by installing the device for any amount between the $20 cost and the $50 consumers are willing to pay. The $30 difference represents the range of potential bargains. Market power affects only the fraction of that $30 that Acme keeps as profit. For instance, if Acme can keep half, then widgets would cost $70 to produce and would sell for $135.\textsuperscript{142} Acme's net profit per widget would increase from $50 to $65. Hence, regardless of market power, if Acme is a rational profit maximizer, Acme will install the safety device. Precisely the same reasoning explains why manufacturers with market power would provide optimal warranties. Schwartz explains:

The question facing a firm is whether it will do better — maximize profits — by selling the contract clauses consumers want at excessive prices, or by selling clauses that consumers do not want at excessive prices. If consumers have a noticeable preference for a particular clause — in economic terms, have a significant willingness to pay — firms will do better, other things being equal, by satisfying this preference: the greater each consumer's willingness to pay, the fewer consumers each firm needs to recover costs and make profits. On the other hand, if the cost to a firm of supplying a particular clause is high in relation to consumers' willingness to pay for it, the clause may not be supplied. . . . Therefore, the likely response of firms to a lack of consumer shopping is to offer consumers the contract clauses they prefer, though at excessive prices.\textsuperscript{143}

Accordingly, all contract terms, with the exception of price, should be efficient even when the manufacturer has significant market power.

Priest provides empirical support for Schwartz' theoretical argu-

\textsuperscript{140.} That is, Acme enjoyed $50 in monopoly profits per Widget sold.

\textsuperscript{141.} To keep things simple, the example assumes that consumers are risk-neutral.

\textsuperscript{142.} This might be the case, for example, if a price of $136 or more would attract other manufacturers into the widget market.

\textsuperscript{143.} Schwartz, \textit{supra} note 7, at 373; see also Priest, \textit{supra} note 12:

A principal weakness of the exploitation theory is that it provides no theoretical link between market power and product warranty terms. Why would a firm with market power maximize its returns by offering one-sided warranty terms rather than by manufacturing shoddy goods or by charging a monopoly price? Generally, monopoly profits are maximized by selling a product identical in all respects (except price) to the product offered under competition. Thus, in theory, a monopolist (or a group of conspiring firms) will gain the greatest return by offering the consumer an optimal warranty, but at a price that exceeds marginal costs.

\textit{Id.} at 1321 (footnote omitted).
ment. Priest argues that, as an empirical matter, product warranties are not exploitative. Priest argues that the evidence instead is consistent with his "investment theory" of warranties. According to the investment theory, "[a] warranty is . . . a contract that optimizes the productive services of goods by allocating responsibility between a manufacturer and consumer for investments to prolong the useful life of a product and to insure against product losses." The theory predicts that "the terms of warranty contracts are determined solely by the relative cost to the parties of these investments." Although Priest tested his theory against warranty provisions involving only the risk of product failure, he maintains that his conclusions would apply equally to provisions involving the risk of personal injury. Most legal economists who have addressed the issue agree. Moreover, others have demonstrated that the same types of warranty provisions that the first generation deemed exploitative of consumers are commonly found in contracts between equally sized commercial entities. It seems difficult to imagine that Firestone is exploiting General Motors.

c. Risk distribution. The contractarians now argue that voluntary manufacturer-provided insurance against the risks of product-caused personal injuries has been unavailable because, very simply, it is inefficient. According to this view, fully informed consumers do not demand insurance against pecuniary losses, especially in light of the fact that first-party health, life, and disability insurance is widely available and comparatively inexpensive to administer; and fully informed consumers do not demand nonpecuniary loss insurance as revealed by

144. See Priest, supra note 130; Priest, supra note 12.
145. Priest, supra note 12, at 1301.
146. Id. at 1298.
147. Id. For further description of the investment theory of warranties, see infra text accompanying notes 187-90; see also infra section IV.B.2 (arguing that the investment theory does not necessarily imply that warranties are not exploitative).
148. Priest, supra note 12, at 1350-51.
149. Legal economists infer from this indirect evidence that contracts between manufacturers and consumers allocating the risk of personal injury, assuming they were enforceable, would also be efficient. See generally Cooter & Ulen, supra note 8, at 422-30 (summarizing literature on this issue); Henderson & Twerski, supra note 42, at 109-16; Schwartz & Scott, supra note 15, at 189-94; Epstein, supra note 43, at 656-58 (relying on Priest's study of consumer product warranties); Epstein, supra note 101, at 2201 (Contracts should work just as well in products liability contexts "when the plaintiff's injury moves from product failure to personal injury or property damage."); Priest, supra note 12; Priest, supra note 130; Schwartz, supra note 7, at 371-72; Schwartz & Wilde, supra note 137, at 1392-93.
150. Session One, supra note 117, at 2247 (statement of Richard Epstein); Schwartz & Wilde, supra note 137, at 1397.
the fact that such insurance is not generally available through first-party insurance markets.151 Hence, the absence of voluntary manufacturer-provided insurance for both pecuniary and nonpecuniary risks evidences the efficacy, not the failings, of consumer product markets.152 The liability "crisis" is the price that society has had to pay for the fact that common law judges forced manufacturers to provide, and consumers to accept, grossly inefficient insurance through the tort system.

Furthermore, scholars now believe that the courts responsible for the shift toward enterprise liability were wrong to assume that consumers have no significant role in accident prevention, an assumption on which manufacturer risk spreading depended.153 Epstein, for example, asks:

[Why should manufacturers, out of possession of the product at the time of injury, be conclusively and universally presumed to be in a better position to avoid loss than "helpless" consumers in possession of the goods? There is little reason to think that this odd balance of prevention capabilities has ever been true in the general case — possession gives both control and information.]154

For another example, Priest emphasizes that, given the "growing empirical evidence that . . . the consumer's role in accident prevention swamps any effects of differential technological investments by providers,"155 there is reason to believe that expansions in manufacturer liability have caused an increase in product accidents.156 Manufacturer risk spreading is inefficient, many believe, in part because it removes consumers' incentives to prevent accidents. Compared to first-party insurance, manufacturer-provided insurance cannot easily cope with moral hazard — that is, with consumers' reduced incentive to take

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151. See infra section IV.B.3. As one commentator observes, proponents of tort law ignored "the fact that tort law was, as an insurance mechanism, simply a disaster: cumbersome, arbitrary, dilatory, wasteful, and needlessly expensive." Jeffrey O'Connell, Foreword to Stephen D. Sugarman, Doing Away with Personal Injury Law ix (1989).

152. See authorities cited supra note 149.

153. See, e.g., Priest, supra note 12, at 1311-12; Priest, supra note 29, at 12-13; Schwartz, supra note 7: The imperfect information rationale for today's strict liability assumes that consumers cannot make rational investments in safety. This assumption is incorrect; consumers need to know fewer and simpler things to behave carefully than they need to know to choose among contract clauses allocating product risks. It is therefore a mistake to relax consumers' obligation to take care. Id. at 356.

154. Epstein, supra note 101, at 2205.


156. See id. at 5-6 ("modern tort law . . . does a scandalously poor job of controlling the accident rate . . . "); see also Viscusi, supra note 117, at 212; Priest, supra note 130, at 1400-01.
efficient precautions to prevent accidents whose costs they will not have to bear.

Together, these new arguments have successfully discredited what had become an ethos of distrust of consumer product markets.\textsuperscript{157} Rejecting the original justifications for strict liability, much of the current scholarly literature now favors contract. As described below, those scholars who continue to recommend regulation of consumer product markets have yet to address, much less successfully rebut, the prima facie case made by the contractarians. The regulators simply assume that regulation in some form is necessary and largely ignore the mutability dimension of the Products Liability Matrix. The contractarians, in contrast, devote much of their attention to the mutability dimension, and most reach the same procontract conclusion. Still, among the contractarians, there remains disagreement over the liability-standard dimension — that is, over what the optimal default liability standard is.

2. \textit{Choosing the Optimal Liability Regime}

\textbf{a. Peter Huber.}

\textit{i. Mutability dimension.} Peter Huber, the obstreperous voice in the contractarian choir,\textsuperscript{158} has delivered the freedom-of-contract message to important audiences outside academia.\textsuperscript{159} His position can be easily summarized: The first generation got it backwards; Americans would be much better off if courts shifted away from tort back to contract in products liability cases. Huber is relentless:

Mustering all the dense prose, arcane jargon, and elaborate methodology that only the very best academic economists muster, [the first generation] set about proving on paper that the whole new tort structure was

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\textsuperscript{157} A similar development has occurred in other areas of the law — perhaps reflecting the appeal of the Coase Theorem to legal thinkers over the past two decades. \textit{See}, e.g., Robert C. Clark, \textit{Contracts, Elites, and Traditions in the Making of Corporate Law}, 89 \textit{COLUM. L. REV.} 1703, 1705 (1989) ("[T]he modern contractual theory of the firm . . . now dominates the thinking of . . . most economically oriented corporate law scholars who focus at all on the theory of the corporation."); \textit{id.} at 1717-18 (describing the rise of "contractualist" views).


\textsuperscript{159} For example, in \textit{Pacific Mut. Life Ins. Co. v. Haslip}, 111 S. Ct. 1032 (1991), in which the Supreme Court rejected a constitutional attack on punitive damages, Justice O'Connor dissented, agreeing with the insurance industry and business groups that punitive damages violate due process, and cited Huber's book to support the proposition that punitive damages have harmed American business. 111 S. Ct. at 1056 (O'Connor, J., dissenting). Vice President Dan Quayle relied on Huber's work to support the claim that the competitiveness of American industry depends on reforming tort law. \textit{See} Geyelin, \textit{supra} note 158.
an efficient and inevitable reaction to failures in the marketplace.160

The[y] promised the world that [strict liability] . . . would bring measurable progress toward . . . protecting life and limb, and helping the injured when accidents do happen . . . . [But their] record is a mountain of pretentious failure.161

The doers, the makers, and the providers of this world [have been] pursued and worried at every turn by a hound-like legal profession . . . . As the tort system expanded, innovation was suppressed, not encouraged. Safety was set back, not advanced. And the consumer ended worse off, even in his personal security, than he would have been had the legal system been slower to rush to his rescue.162

The legal system, often as random and capricious as the accident itself, yields less insurance and — perversely — still more accidents. . . . A cure is at hand, if we can find judges willing to administer it. . . .

. . .

What's to be done? . . . [For] fundamental change, we must rebuild the law of accidents around ancient time-tested principles of consent, cooperation, and a robust law of contract.163

It is never too late to admit that a wrong road has been taken. This is particularly true when the road leads to a poisonous swamp.164

Huber's allegiance to contract is unmistakable.

ii. Liability-standard dimension. As for what the liability standard should be, in contrast, Huber expresses no clear preference. He explains:

[Freedom of contract] is the only battle I am fighting. Any set of legal presumptions the courts want to prescribe on silence is okay with me, provided one has a real law of disclaimer to bring things back to a market optimum. Free contracting will then restore an optimal state of affairs, in the same way it would if there were a silly presumption like "all cars can survive collisions with Sherman tanks."165

For Huber, the choice between absolute manufacturer liability and absolute consumer liability makes little difference, so long as liability can be disclaimed. As suggested in the previous quotation and, more generally, throughout Huber's book,166 however, Huber clearly believes manufacturers and consumers would, given the chance, privately contract to an absolute consumer liability standard (Box 1). He does not expressly advocate that particular standard, presumably because he is

160. HUBER, supra note 8, at 6.
161. Id. at 11.
162. Id. at 154.
163. Peter Huber, Insurance, Not Lawsuits, for the Accident Prone, WALL ST. J., Sept. 28, 1988, at 24; see HUBER, supra note 8, at 224-27.
164. HUBER, supra note 8, at 18.
165. Session Three, supra note 128, at 2339 (statement of Peter Huber).
166. HUBER, supra note 8.
confident that the contracting costs under his proposed regime would be small. So long as contracting is permitted, the Coase Theorem can do the rest.\textsuperscript{167}

Yet, while Huber expresses a strong faith in the efficiency of unregulated consumer product markets, he inexplicably argues that some form of regulation of consumer product markets is necessary. For instance, Huber proposes a "law of warning," which would impose upon product manufacturers a duty of "reasonably full disclosure of safety-related information."\textsuperscript{168} According to Huber, risk information from warnings would assist consumers in the contracting process.\textsuperscript{169} The question that Huber does not answer, however, is why a law of warning is necessary.\textsuperscript{170} Why would manufacturers (or, perhaps, third parties) not respond via market mechanisms to consumer demand for risk information? By calling for a law of warnings, Huber implicitly concedes that consumer product markets do fail.\textsuperscript{171} But once the possibility is allowed that consumers may be poorly informed and that the market may not fill consumer demand for information, questions arise concerning why and to what extent consumers are uninformed, and whether a law of warning would sufficiently overcome this potential source of market inefficiency.\textsuperscript{172} Huber's apparent doubt as to the extent to which manufacturers will respond to consumer demand for product risk information renders dubious his otherwise sanguine view of consumer product markets. To put the point another way, if Huber does not trust the market for product risk information, perhaps he

\textsuperscript{167} See Ronald Coase, The Problem of Social Cost, 3 J.L. & Econ. 1 (1960). For simplicity, we have placed Huber in Box 1, even though he claims to be arguing only that the law should move to Column I. We suspect that Huber would, if pressed, choose absolute consumer liability over the alternatives, in part because Huber believes that parties would otherwise contract to Box 1. Thus, adopting Box 1 saves those transaction costs. See infra text accompanying note 325 (describing reasons why the contractarians should choose absolute consumer liability as the default).

\textsuperscript{168} HUBER, supra note 8, at 213. Arguably, Huber's warning requirement places him in Box 7. See infra note 173.

\textsuperscript{169} Huber seems to argue that, so long as consumers are informed of product risks, free contracting will yield efficient outcomes. Under certain assumptions, this is a well-accepted result. See, e.g., SHAVELL, supra note 9, at 52-53; Croley & Hanson, supra note 4, at 74-75.

\textsuperscript{170} Presenting a similar puzzle, Huber seems to envisage some role for administrative regulation. See HUBER, supra note 8, at 46-51 (arguing that manufacturers who have complied with agency standards should, for that reason, be exempt from tort liability). Cf. generally Peter Huber, Safety and the Second Best: The Hazards of Public Risk Management in the Courts, 85 COLUM. L. REV. 277 (1985) (arguing that administrative regulators are better suited than courts to manage "public risks" — i.e., mass torts).

\textsuperscript{171} See STEPHEN BREYER, REGULATION AND ITS REFORM 26 (1982) ("In well-functioning markets, one would expect to find as much information available as consumers are willing to pay for in order to lower the cost or improve the quality of their choices."); see also infra text accompanying notes 343-45. This interpretation of Huber's position is strengthened by the fact that he offers no examples of pre-HenningSEN, voluntarily provided, product-risk warnings.

\textsuperscript{172} See infra notes 343-45 and accompanying text and sections IV.B.1 and IV.C.1.
should not trust the market for product safety. How these two sides of Huber — the side that insists on freedom of contract and the side that calls for regulatory intervention — can be reconciled is unclear.

b. Richard Epstein.

i. Mutability dimension. Professor Epstein’s views are, in one dimension, indistinguishable from Huber’s. Like Huber, Epstein exhibits a deep faith in the market and in contract. According to Epstein, “[t]he common law restrictions on freedom of contract are not justified by any concern with externalities, or with duress, fraud, and incompetence of individual consumers.” He further states: “It is very difficult to identify either the externality or the lack of information . . . that would justify overriding private consensual arrangements.” In short, interference with contractual allocations of product risk is not justified.

ii. Liability-standard dimension. In contrast to Huber, however, Epstein is not indifferent among possible default liability standards. In Epstein’s view, contracting costs can be saved by choosing the default standard that most informed and competent parties would want. Because of his confidence that free markets produce efficient

173. Huber’s failure to explain why a law of warning is needed seems especially egregious given that his proposed law of warning would likely recreate many of the same problems that his proposal is supposed to eliminate. To enforce a law of warning, a jury would presumably have to determine the adequacy of the warning in light of the product’s risks and the plaintiff’s injuries. It is not clear that this task is any less cumbersome and costly than the tasks that the juries must undertake in the current regime and that Huber believes are the source of the liability crisis. Moreover, Huber does not specify what liability standard would apply in the event that a manufacturer was held not to have met its duty to warn. That is, Huber’s discussion fails to make clear whether a manufacturer would be liable for the costs of injuries about which the manufacturer had not provided adequate warning. For the law of warning to be effective, some standard more strict than absolute consumer liability would have to be employed. Indeed, the only standard that would induce manufacturers to inform consumers of unpreventable and residual risks would be absolute manufacturer liability. See infra notes 420-22 and accompanying text (explaining why warning proposals often translate to a Box 7 regime). Perhaps warnings are what Huber has in mind when he at one point refers to “[c]ontract . . . with a more human face.” HUBER, supra note 8, at 226. However, to the extent that Huber believes any standard more strict than absolute consumer liability yields inefficiencies, he needs to explain why the benefits of his warning requirements more than offset those inefficiencies.

174. Epstein, supra note 101, at 2214.

175. Session One, supra note 117, at 2230 (statement of Richard Epstein).

176. Additionally, Epstein does not recommend a law of warning.

177. “Default provisions are surely important, if only because they influence the cost of contracting to the proper social position.” Epstein, supra note 101, at 2203. This view of default rules is common. See POSNER, supra note 10, at 82; Clark, supra note 157, at 1706; Schwartz, supra note 7, at 361. But see Ayres & Gertner, supra note 15 (arguing that the “would have wanted” approach to gap-filling can yield inefficient results); Ian Ayres & Robert Gertner, Strategic Contractual Inefficiency and the Optimal Choice of Legal Rules, 101 YALE L.J. 729 (1992); Jason S. Johnston, Strategic Bargaining and the Economic Theory of Contractual Default Rules, 100 YALE L.J. 615 (1990).

The purported savings in transaction costs may not be a very strong justification for picking a default rule in products liability law, where the contracts are written in large quantities via war-
contracts, Epstein recommends that courts adopt a default liability standard that mimics the market: "[P]roducts liability rules should imitate to the extent possible the patterns observed in voluntary transactions." Furthermore, Epstein stresses that, under his proposal, free contracting would probably produce a *wide assortment* of warranties, depending on the specific conditions of different markets, and that the optimal liability standard — given that it would mimic the market — would vary accordingly. According to Epstein, the anticontractual bias of [recent judicial developments] has proved to have devastating long-term consequences for the soundness of the prod-

178. Choosing a default rule that informed, competent consumers would want may not minimize transaction costs if consumers are not, in fact, informed or competent. Uninformed or incompetent consumers may contract around the efficient rule to an inefficient rule. By adopting a mimic-the-market approach, however, Epstein ensures that transaction costs will be minimized even if consumers act counter to their own interests. Of course, some might criticize the mimic-the-market approach on the ground that it reflects the choices of uninformed or incompetent consumers and ensures that they will continue to contract to an inefficient result. Epstein evades that criticism, however, by gainsaying the possibility. In his view, consumers are well informed and competent, and market outcomes cannot be improved upon. See supra text accompanying notes 174-75. For an illuminating and more general critique of the view that contractual allocations are presumptively efficient, see Duncan Kennedy & Frank Michelman, *Are Property and Contract Efficient?*, 8 HOFSTRA L. REV. 711, 739-70 (1980).


180. Epstein argues that products liability insurance is appropriate if the market provides insurance against the particular risk at issue. He observes, for example, that commercial airline passengers can and often do purchase flight insurance, and that such insurance is available because that setting presents minimal moral hazard. Epstein argues that products liability insurance against these risks should be provided because the moral hazard problem would not burden that market. See Epstein, supra note 43, at 666-67. But this position seems puzzling insofar as Epstein’s recommendation allows consumers to purchase products liability insurance to protect only against risks for which they already have, or can obtain, market-provided insurance. In other words, Epstein’s position seems to be that, if consumers cannot obtain first-party insurance for a given product or service risk, product-liability insurance is inappropriate; but if consumers can themselves obtain first-party insurance, then products liability should provide it. Why products liability insurance should ever be provided is unclear. It would simply be redundant. For a similar criticism, see Samuel A. Rea, Jr., *Comments on Epstein*, 14 J. LEGAL STUD. 670, 673 (1985); see also infra note 182. Perhaps Epstein thinks that market failures besides moral hazard plague first-party insurance markets and that consequently insurance provided through products liability is an appropriate gap-filling measure for consumers who cannot or do not buy sufficient first-party coverage. If so, however, that calls into question Epstein’s premise that insurance provided through products liability is appropriate only where market-provided insurance is available. If first-party insurance markets do not provide optimal insurance, then possibly products liability insurance should be available even where first-party insurance is not. See infra section IV.C.3.b.
ucts liability system. The system of products liability was stripped of its powers of self-correction. In essence, [those developments] reserved to the courts a legal monopoly to fashion the relevant terms and conditions on which all products should be sold in all relevant markets. The centralization of power . . . leads to a legal regime that is unresponsive to changes in demand or technology. The judicial standard form becomes a Procrustean bed into which all private transactions have to fit at their peril. It may well be the case that certain uniform provisions are appropriate for the full range of products liability cases. But if the optimal solution is one that cuts off the tort liability for consequential damages, then a judicial rule that renders tort liability nonwaivable will not only be uniform, but also wrong in every case. More likely, in practice there may be important variations in the kinds of terms that are appropriate for certain classes of products and defects. Strict liability on manufacturers for contamination of products sold in sealed containers may make good sense, but far more complex allocation of risks may be appropriate in design and warning cases . . . . Yet here, too, all efforts to find better ways to sell and market products are cut off before they are born, so that new information about products liability terms cannot be generated by voluntary transactions. Today all doctrinal innovation has to come from the courts, where the technical lags and information deficits are at their highest. Yet there is no alternative forum, save legislation, in which to override judgments when they have proved mistaken; indeed, there is no way to find out whether they are mistaken at all.181

Epstein's discussion is perplexing. On one hand, he stresses that a wide variety of warranties would likely exist under his proposed market-mimicking approach; he even goes so far as to suggest that under certain conditions "you [c]ould see contracts that create a strict liability rule."182 Elsewhere, however, Epstein (like Huber) seems to recognize that there would most likely be but one default rule: absolute

181. Epstein, supra note 101, at 2202-03. Epstein never explains how sealed food is sufficiently different from other consumer products to justify a rule of strict liability in markets for sealed food. If Epstein believes that some sort of market failure (e.g., imperfect consumer information) hinders the market for sealed food, he does not explain why the presence of that failure would not render contracts between manufacturers and consumers of sealed food inefficient.

182. Session One, supra note 117, at 2237 (statement of Richard A. Epstein). Epstein suggests that a strict liability regime would be efficient in commercial aviation markets because, in "voluntary markets," "the purchase of commercial flight insurance is a routine activity." Epstein, supra note 43, at 666-67. Again, his general argument is "that products liability rules should imitate to the extent possible the patterns observed in voluntary transactions," id. at 669, and — because insurance is routinely available through the market against the risks of commercial airline accidents — a strict liability regime would not be inefficient for allocating the risks of commercial airline accidents. But Epstein's argument poses a problem for his more general conclusion that there would be "no consequential damages and complete reliance on first-party insurance" in an efficient products liability regime. Session One, supra note 117, at 2245 (statement of Richard A. Epstein). What Epstein apparently does not realize is that accidental death and dismemberment insurance is widely and routinely available in voluntary markets. See Croley & Hanson, supra note 4, at 60 n.200. Thus, under the mimic-the-market approach he prescribes, it is not clear how Epstein can conclude that consumers, who demand market-provided insurance against consequential damages, should not be compensated for the consequential damages resulting from product accidents.
consumer liability. He knows that prior to 1960, when disclaimers and exculpatory clauses were typically enforced, all manufacturers disclaimed liability for the costs of personal injuries in their warranties.183 Although Epstein recognizes the implications this fact has for his proposed default rule, he maintains his allegiance to contract: "If the uniformity of contractual terms governing manufacturers' liability for personal injury indicates that one solution — [absolute consumer liability] — dominates all others, then one can make an even stronger argument that the change from no liability for personal injuries to total expectation-measured damages [has been] momentous."184 Epstein's position is thus clear: no matter what their terms, all consumer contracts based on market preferences are efficient.185 Although Epstein argues that courts should mimic the market, his prescription translates to a proposal that courts should return to Box 1 — to a standard approaching Lord Albinger's rule in Winterbottom.

More important, if Epstein is correct that contracting costs are high enough to justify selecting a particular liability standard as the default (as opposed to just picking any default at random, as Huber suggests), then it is not clear how Epstein can be confident that markets will have arrived at the efficient standard given those contracting costs. If markets have not arrived at the optimal standard, then mimicking markets will yield inefficient law. Thus, some tension exists between Epstein's justification for adopting a particular default and his method of choosing it.186

183. See, e.g., Session One, supra note 117, at 2245 (statement of Richard A. Epstein) ("When you turn to products liability, you should ask the question: to what extent does the scheme that we now impose deviate from the market? The market solution says no consequential damages and complete reliance on first-party insurance. The reformers got things backwards and enacted the opposite."); id. at 2232.


185. Epstein and his fellow contractarians share the implicit but inexplicable premise that all markets work perfectly except one: the market for liability insurance. Cf. Epstein, supra, at 648.

186. Several more general problems confront Epstein's proposed mimic-the-market approach. First, if Epstein were correct that warranties would vary depending on the market context, then a single default rule would not significantly lower transaction costs given that so many manufacturers would still need to contract around it. See supra note 177. If Epstein instead expects courts to create a highly tailored set of default rules to match the different and changing markets, then he needs to explain just how they would go about it. Epstein offers no concrete suggestions for how liability rules would differ for different product types. Existing contracts, to which lawmakers would be forced to turn, were written under the current regime. Those contracts therefore reflect the preferences of only the parties who thought opting out of the current default provisions was worthwhile. In short, examining existing contracts might provide no indication of what default liability standard most parties would want. Perhaps those parties who have been silent — who have not attempted to contract around the current liability standard — would prefer the current default to any possible alternative. The costs of opting out of the current standard, however, may be high enough to prevent some parties who would prefer a different standard from opting out. (This is analogous to Epstein's argument that we do not see
c. George Priest.

i. Mutability dimension. Unlike Huber and Epstein, Professor Priest does not fit easily into the contractarian camp, notwithstanding the facts that he purports to be a champion of contract and that his powerful "investment theory" of warranties forms the foundation of the contractarian position. Again, that theory holds:

A warranty . . . is the instrument that expresses consumer preferences for allocative [i.e., preventive] or insurance investments. It is a contract that divides responsibility for allocative investments and insurance between the consumer and the manufacturer. The content of the contract is determined by the respective costs to the two parties of allocative investments or insurance. According to this approach, a manufacturer makes investments . . . up to the point at which the marginal costs of such investments equals the marginal benefit. A manufacturer, then, offers market insurance for those losses or items of service for which market insurance is less costly than insurance or allocative investments by the consumer himself.

To the extent that a manufacturer disclaims liability or excludes or limits its warranty coverage, however, it shifts to the consumer the obligation to make allocative investments to preserve the product or to self-insure for its loss. A disclaimer or an exclusion of coverage is the functional equivalent of provisions, common in other contracts, that explicitly require one of the parties to take certain actions to prevent breach or to insure for losses from uncertain events. The theory predicts that disclaimers of liability and exclusions of coverage will be observed in consumer product warranties for those specific allocative or insurance investments that the consumer can provide more cheaply than the manufacturer. In this view, disclaimers and exclusions can be said to be demanded by consumers because of the relative cheapness of consumer allocative investments or of self-insurance.

According to Priest, then, courts should uphold a warranty as if it were an arms-length contract between two fully informed and rational parties. If contracting were freely permitted, he suggests, the warranties between manufacturers and consumers would allocate all consequential damages, including the costs of personal injuries, to consumers. In Priest's words: "The contracts that were in force prior

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personal injury warranty disclaimers because courts typically do not enforce them.) Thus, it is not obvious that lawmakers could ascertain the optimal default liability standard by examining existing arrangements.

187. See supra notes 144-50 and accompanying text.

188. Priest, supra note 12, at 1313. Priest's description of his investment theory of warranties contains the argument that disclaimers or exclusions of coverage may be the "functional equivalent" of common contractual provisions that explicitly require certain acts on the part of the parties to prevent breach. These implicit counterparts in warranty "contracts," however, must be, other things equal, inferior. Otherwise, other contracts would not commonly include explicit provisions. No matter how much Priest and others may characterize warranties as "contracts," this simple observation might make one skeptical at the outset that warranties can be or should be understood or treated as common contracts.
to the present regime added up to no liability for consequential damages, none whatsoever. I am certain that this is the contractual optimum.189 Priest thus appears to share Huber's and Epstein's complete faith in contracts. Moreover, he appears to join their call for a return to Row 1.190

ii. Liability-standard dimension. On the liability-standard dimension, however, Priest parts company with Huber and Epstein, as when he admonishes Huber for unrealistically overstating the role of contract in products liability: "Peter, I think the contractual optimum is so radically different from the current regime that thinking you can achieve it by just allowing an opening for contract is just pie in the sky."191 Apparently Priest believes contracting costs are high enough to prevent parties from contracting around an inefficient default.192 For Priest, therefore, initial entitlements matter in a way that they do not for Huber and Epstein. Huber believes that contracting costs are trivial and that therefore the choice of legal standards has no great efficiency consequences.193 Epstein apparently believes that contracting costs are significant, though not so significant that they stifle efficient transactions, and that therefore lawmakers can save transaction costs by choosing the correct standard.194 In contrast to both, Priest's position implies that the choice of a legal rule can significantly affect the allocation of resources.

In light of his view that warranties are efficient contracts that courts should uphold, Priest seems to have taken two contradictory positions. One might anticipate that Priest would advocate absolute consumer liability. After all, he recognizes that product warranties universally contracted to that standard before courts prohibited manu-

189. Session Three, supra note 128, at 2339 (statement of George L. Priest); see also Priest, supra note 12, at 1350-51.

190. See Session One, supra note 117 (statement of George L. Priest):
I agree with [Richard Epstein] entirely that private contracting is in fact efficient. . . .
 . . . [But I]n no product warranty that I have seen written before 1960 — and certainly none written after that date — was provision ever made for liability for personal injury. In every products liability case, the judges saw, consequential damages were excluded by contract . . . .
 . . . Once you have a broader view of how warranties operate, you see why it might be in the rational long-term interests of consumers for manufacturers to disclaim liability for personal injury across the board. Consumers were not bargaining for this type of protection, and manufacturers never contracted to accept liability for personal injury.
Id. at 2232.

191. Session Three, supra note 128, at 2339 (statement of George L. Priest).

192. Although he never makes this belief explicit, it is consistent with his view that warranties are standardized to save transaction costs. See Priest, supra note 12, at 1307.

193. See supra notes 165-67 and accompanying text.

194. See supra notes 176-79 and accompanying text.
facturers from disclaiming liability for personal injuries. If a consumer was injured, the manufacturer of the product that caused the injury could at most be liable for replacement or repair of the defective good. The injured consumer bore the balance of the costs, including medical expenses, lost income, and all nonpecuniary losses. Thus, Priest's studies of warranties suggest that an absolute consumer liability standard is the rule to which consumers and manufacturers would contract if only they could. Moreover, many of Priest's arguments about how the current regime caused the liability "crisis" also lead to the conclusion that courts should adopt a regime of absolute consumer liability. 196

For reasons not entirely clear, however, Priest urges courts to adopt not a mutable absolute consumer liability rule (Box 1), but rather a mandatory negligence standard (Box 4), under which manufacturers would be liable for all initially preventable losses:

Controlling the accident rate is a very simple proposition. There is now a voluminous literature in the law and economics field unanimous in its conclusion that the accident rate can be reduced to the level optimal for the society by asking at trial one simple question: Is it possible to identify any specific cost-effective action that either the injurer or victim could have taken which would have prevented the accident? If so, then liability should be placed on the party that could have prevented the accident most effectively in order to create incentives to take such actions in the future. 197

Priest's reliance on the "voluminous literature" in law and economics to justify his proposed negligence standard is misplaced. As Priest has himself emphasized, that literature makes clear that any liability standard will, if markets work, yield the same efficient result. 198 Thus, although Priest's arguments strongly suggest that courts should adopt a mutable, absolute consumer liability regime (Box 1), he nevertheless inexplicably concludes that courts should adopt a mandatory negligence standard (Box 4). 200

195. See supra note 190.
196. See Croley & Hanson, supra note 4, at 19 n.76. See generally id. at 12-50.
198. Indeed, in his response to previous work of ours, Priest stresses that, in the absence of market failures, "there will be exactly the same product output, the same product price, and the same number of product injuries whether the legal rule provides for no manufacturer liability, absolute manufacturer liability, or a standard of liability anywhere in between." George L. Priest, Can Absolute Manufacturer Liability Be Defended?, 9 YALE J. ON REG. 237, 252 (1992). There, Priest also argues, inexplicably, that no market imperfections would justify either choosing negligence over absolute consumer liability or making his proposed negligence standard, or any standard, mandatory. Id. at 252-58.
199. Indeed, as explained above, those scholars who now argue for such a regime rely heavily on Priest's arguments. See supra section III.B.1.
200. Priest's choice of a negligence rule suggests that in his view the consumer product mar-
d. Alan Schwartz.

i. Mutability dimension. Professor Schwartz' position is easily summarized. He argues straightforwardly that, whatever the liability standard, it should be mutable by contract:

[T]he evidence in support of market failure is too weak to support the contract-proscribing aspect of strict liability. Rather, markets should be permitted to generate the terms under which consumers purchase. This conclusion implies first that courts should enforce exculpatory clauses and contractual specifications of the seller's quality obligation, and second that when the parties' agreement is silent, courts should fill in the gaps with the appropriately derived optimal contract.201

Like his fellow contractarians, Schwartz favors freedom of contract.

ii. Liability-standard dimension. As for the liability-standard dimension, Schwartz argues for strict manufacturer liability with a contributory negligence defense: "Well-informed consumers probably would contract for this risk allocation, so the law, following the dictates of consumer sovereignty, should provide it."202 Schwartz chooses strict liability "first by supposing that persons prefer contracts that maximize their expected utility, and then by deriving the terms that this preference best implies."203

According to Schwartz, strict liability is the preferred standard "[b]ecause it induces both consumers and firms to reduce accident costs optimally . . . ."204 By itself, however, this is hardly a dispositive argument. Under the assumptions that led Schwartz to endorse freedom of contract, he could have shown that any liability standard would optimize consumer and manufacturer investments in accident prevention.205 To be sure, Schwartz does narrow the choices of liabil-

201. Schwartz, supra note 7, at 355-56.
202. Id. at 356.
203. Id. at 357.
204. Id. at 393.
205. See LANDES & POSNER, supra note 7, at 24-28, 313-14; SHAVELL, supra note 9, at 6-32; Hanson & Logue, supra note 11, at 168-69. See generally Coase, supra note 167.
ity standards by one when he argues that courts cannot implement a negligence standard efficiently. But he just as well could have recommended absolute consumer liability as strict liability. Strict liability may be more efficient than absolute consumer liability where transaction costs are high and where there is no market nexus; but where, as in Schwartz' model, the market generates efficient results on its own, it seems doubtful that the benefits of legal intervention would exceed the costs.

Schwartz has a response. He points out that consumers demand insurance against the risk of pecuniary losses. Because only strict liability automatically insures consumers for the costs of initially pre-

206. See Schwartz, supra note 7, at 386-88; see also Epstein, supra note 10, at 84-88; Hanson & Logue, supra note 11, at 169-70.

Given that Schwartz and Epstein do not believe that courts can efficiently implement a negligence standard, they should argue that parties should not be permitted to contract to a negligence regime on their own if the products liability standard is otherwise mutable. That is, their arguments regarding courts' competence at conducting cost-benefit analysis concern not only what liability standard should be adopted as the default, but also what liability standards parties should be permitted to contract to given a particular default. Thus, although Schwartz and Epstein claim to argue for freedom of contract, they actually argue for limited freedom (a default standard with mandatory components). This raises an interesting question: What if under a free contracting regime parties sometimes opted out of the default and adopted a negligence regime (or did not opt out of a negligence default)? Assuming that markets work as well as the contractarians contend, Schwartz and Epstein would have to choose between their arguments that such contracts do not satisfy the consumer sovereignty norm and their arguments that markets work and thus correctly reveal consumer preferences. Neither Schwartz nor Epstein considers this problem.

207. See Posner, supra note 10, at 163.

208. Schwartz might have argued that he prefers strict liability to absolute consumer liability on the ground that, even though contracts are ultimately efficient, making manufacturers liable for initially preventable and unpreventable accidents would require manufacturers to disclaim liability in order to contract out of the default to an absolute consumer liability standard (Box 7). The act of contracting around the default would require manufacturers to reveal certain information that consumers may not possess. In this way, the strict liability default would serve as what Ayres and Gertner have termed a "penalty default" — a default standard that "[gives] a more informed contracting party incentives to reveal information to a less informed party." Ayres & Gertner, supra note 15, at 97; see also id. at 95-107 (providing a more general description of penalty defaults); Johnston, supra note 177, at 616; cf. Alan Schwartz, A Theory of Loan Priorities, 18 J. LEGAL STUD. 209, 218-24 (1989) (arguing that creditors could obtain information from debtors about prior claims on a borrower's property through contract clauses — the equivalent of penalty defaults — even in the absence of a public filing system). See infra section IV.C.1 (describing Box 7 approach).

Schwartz, however, makes no such argument. To the contrary, he claims to advocate a liability standard that would give consumers the "optimal contract" — the contract that informed, competent consumers would prefer," not a default standard that would, because it is inefficient, require parties to contract around it. See Schwartz, supra note 7, at 355; see also text accompanying note 120. Moreover, if consumers estimate product risks correctly on average, as Schwartz suggests, what does the system gain by forcing manufacturers to contract around an inefficient default standard? Finally, even were Schwartz to argue that consumers are comparatively uninformed of product risks, a disclaimer or exclusion in a warranty would add little to their information. What would they learn beyond the fact that they would need to obtain insurance from another source for the unspecified risk?

209. See Schwartz, supra note 7, at 404.
preventable and unpreventable accidents,210 strict liability will be the standard of choice. That response, however, does not explain why consumers would want to pay for manufacturer-provided insurance when they possess, or could obtain, first-party insurance at what most scholars believe are much lower rates.211

Schwartz argues further that some consumers may systematically underestimate product risks. Under absolute consumer liability, those consumers would buy too little first-party insurance, and manufacturers, with suboptimal incentives to invest in safety would produce too many unsafe products.212 Schwartz thus argues for holding manufacturers strictly liable for unpreventable accidents because in a strict liability regime "the price of [the products] will more accurately reflect their accident costs, thereby better informing consumers of the risk of driving (just as a warning would)."213 Ultimately, then, Schwartz' justification for strict liability is that, without it, consumer misinformation leads to inefficient results. Schwartz' position along the mutability dimension is premised on his claim that markets do not fail, but his position along the liability-standard dimension is based on his claim that they do fail. Thus, although important and in many ways persuasive, Schwartz' argument, like Huber's, Epstein's, and Priest's, contains a significant internal tension.

To see the tension in Schwartz' proposal more clearly, suppose that courts adopted his strict liability default standard (Box 5) and that some consumers systematically underestimated product risks. Those consumers who were well informed about product risks would contract around the default because they would have sufficient first-party coverage and would refuse to pay extra for something they already had. Those consumers who underestimated product risks would contract around the default despite the fact that they had inadequate first-party insurance, because — given the fact that they underestimated product risks — they would assume they already had sufficient first-party coverage. In short, well-informed consumers would opt out of the default because they knew better, and ill-informed consumers would opt out because they did not know better. A strict liability default would create only transaction costs.214

210. Utility-maximizing consumers may not demand insurance against residually preventable accidents — that is, accidents that they could have prevented at least cost. Accordingly, Schwartz does not recommend an absolute manufacturer liability standard.

211. See Schwartz, supra note 7, at 393.

212. Id. at 376, 405-06.

213. Id. at 399.

214. In a more recent article, Schwartz presents the case against strict liability. See Schwartz, supra note 87. There, Schwartz confirms his location in Column 1, but seems to place
Returning again to the Products Liability Matrix, Table 3 summarizes the contractarians' positions.
TABLE 3
THE PRODUCTS LIABILITY MATRIX
THE CURRENT PRODUCTS LIABILITY DEBATE:
THE CONTRACTARIANS

<table>
<thead>
<tr>
<th>DEGREE OF MUTABILITY</th>
<th>(Column 1)</th>
<th>(Column 2)</th>
</tr>
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<td>Default</td>
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</tr>
<tr>
<td>(Row 1)</td>
<td>(Box 1)</td>
<td>(Box 2)</td>
</tr>
<tr>
<td>Absolute Liability</td>
<td>Huber</td>
<td></td>
</tr>
<tr>
<td>Consumer Liability</td>
<td>Epstein</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Priest?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Schwartz?</td>
<td></td>
</tr>
<tr>
<td>(Row 2)</td>
<td>(Box 3)</td>
<td>(Box 4)</td>
</tr>
<tr>
<td>Negligence</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Priest</td>
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</tr>
<tr>
<td>(Row 3)</td>
<td>(Box 5)</td>
<td>(Box 6)</td>
</tr>
<tr>
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<td>Schwartz</td>
<td></td>
</tr>
<tr>
<td></td>
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<td></td>
</tr>
<tr>
<td>(Row 4)</td>
<td>(Box 7)</td>
<td>(Box 8)</td>
</tr>
<tr>
<td>Absolute Manufacturer Liability</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
C. The Regulators: Market Skeptics

Section III.B showed that the contractarians should, but do not, take positions in the liability-standard dimension and the mutability dimension that are consistent with their starting assumption that consumer product markets are free of any significant imperfection. This section argues that the regulators should, but do not, take positions along the two products liability dimensions that are consistent with their starting assumption that consumer product markets have significant imperfections.

1. Regulating Product Risks: Tort Versus Administrative Law

As mentioned above, although the regulators for the most part share the contractarians' belief that products liability is in need of reform, they do not share the contractarians' faith in the market. The regulators believe that unfettered product markets will achieve suboptimal allocation of product risks. Yet, as described below, the regulators have not offered much in the way of a response to the contractarians' case for unregulated markets. Many of the regulators simply assume that free markets will not produce efficient investments in product safety and concentrate on proposing solutions to unspecified market failures.

The regulators propose a range of solutions, according to which the tort system would serve a range of roles. At one end of the spectrum, Professor Landes and Judge Posner argue that reform is not necessary and that the tort system as we know it is an efficient mechanism for regulating consumer product risks. The other regulators disagree on both counts, largely because they believe that tort law caused the liability crisis of the mid-1980s. Professor Viscusi, for one, at times seems to countenance a significant role for tort law, but argues ultimately that product risks should be regulated principally by administrative agencies and that the tort system should serve as only a secondary or residual system for product risk regulation. Professor Rose-Ackerman also favors administrative regulation, but she calls less equivocally for the complete displacement of tort law, arguing that tort law should serve little more than a "stopgap" function. Finally, at the other end of the regulators' spectrum, Professor Sugarman proposes doing away with tort law altogether. These scholars' views are discussed in turn.
2. Choosing the Optimal Form of Regulation


i. Liability-standard dimension. Professor Landes and Judge Posner are unique among products liability scholars in not calling for reform. They are also the only regulators who challenge, albeit sparsely, the contractarians' position that consumers are sufficiently well informed of product risks for product markets to yield efficient levels of safety. Landes and Posner contend that information costs lead to a significant market failure in the market for consumer product warranties:

> [G]iven the high costs (relative to benefits) of information about an extremely low-probability event, [the expected damages from which are low], it may not pay the consumer to study a disclaimer of liability carefully even if it is clear and conspicuous. A manufacturer will reap little consumer will from fooling consumers with a disclaimer that they fail to read, because product accidents are so rare anyway; and for the same reason competing manufacturers will not find it profitable to try to compete by offering to disclaim disclaimers. High information costs relative to the benefits of the information may defeat voluntary contracting.

Thus, the market fails to allocate the costs of consumer product risks efficiently according to Landes and Posner, because consumers are imperfectly informed, a consequence of consumers' rational decisions not to procure information when the costs of doing so would outweigh the benefits.

In their view, the empirical evidence that contractarians like Priest offer to support their belief that product warranties are efficient is relevant only with regard to risks of product replacement and repair. Such evidence proves nothing about the likely efficiency of warranties for allocating the risk of personal injuries. Because of this market failure, their argument goes, strict liability is often the most efficient liability standard:

> The kind of product failures against which manufacturers expressly warrant their products are frequent and hence familiar to consumers and therefore enter into their buying decisions. But product failures that cause serious personal injuries are extremely rare, and the cost to the consumer of becoming informed about them is apt to exceed the expected benefit. . . . Therefore, if the manufacturer is not made liable, the marketplace may fail to discipline him by diverting consumers to safer brands. Strict liability in effect impounds information about product

215. Not coincidentally, they are also unique in ignoring insurance considerations in their analysis of alternative regimes. See infra note 239.

216. LANDES & POSNER, supra note 7, at 281-82 (emphasis added); see also Landes & Posner, supra note 12, at 543-45, 547.

217. See supra notes 144-48 and accompanying text.
hazards into the price of the product, resulting in a substitution away from hazardous products by consumers who may be completely unaware of hazards.218

Landes and Posner conclude, however, that, depending on the context, either "a strict liability rule... [or] a negligence rule will create incentives for the parties to take the right amount of care in product cases even if [contracting costs] are prohibitive."219 Thus, Landes and Posner seem to occupy Rows 2 and 3 of the Products Liability Matrix.

ii. Mutability dimension. The same market failure that leads Landes and Posner to argue in favor of a strict liability or negligence standard also appears at first glance to lead them to conclude that the liability standard should be mandatory:

[Our] analysis may... explain the law's refusal to enforce disclaimers of liability for personal injuries caused by product accidents. If the hazard is very small, it will not pay the consumer to be attentive to disclaimers; and, for the same reason, the manufacturer will not reap significant ill will when he enforces the disclaimer in those very few cases in which someone is injured.220

Thus, they conclude "the law's decision not to leave the regulation of product safety entirely to the market appears to be an economically rational one."221 This suggests that Landes and Posner properly belong in Boxes 4 and 6 of the Products Liability Matrix.

But Landes and Posner's position on the mutability dimension comes with a twist. They argue not that the liability standard should always be mandatory, but that it should be mandatory only for nonobvious risks. Thus, Landes and Posner seem to take the position that the liability standard should be only presumptively mandatory.222 To this extent, Landes and Posner accurately might be placed in Boxes 3 and 5 of the Products Liability Matrix. The presumption against enforcing disclaimers of liability is rebutted when "the danger to the consumer is in the product itself and... the danger is obvious to the

218. Posner, supra note 10, at 166; see also Landes & Posner, supra note 7, at 280-82.
220. Posner, supra note 10, at 166; see also Landes & Posner, supra note 12, at 544. Elsewhere Landes and Posner write:
[T]he injurer and the victim have a contractual relationship, so why shouldn't they be left to work out the optimal combination of safety precautions contractually?...
The answer is that contracts are costly to make and that the costs may well exceed the benefits, relative to regulation by tort law, when the contingencies that would be regulated by contract — death or personal injury from using a product — are extremely remote. Landes & Posner, supra note 7, at 280 (footnote omitted). Others have suggested a similar market failure. See, e.g., Cooter & Ulen, supra note 8, at 428; Hanson & Logue, supra note 11, at 174-75.
221. Landes & Posner, supra note 12, at 547.
222. Put differently, they take the position that manufacturers should be able to contract around the default by ensuring that consumers are well informed.
consumer . . ." 223 Under such circumstances:
the consumer . . . will be deemed to have assumed the risk of an accident
if one occurs . . . and the manufacturer will not be liable. Therefore, if
the manufacturer wants to disclaim liability, he need only take steps to
make sure that the danger in his product is obvious to the consumer.
The danger may be obvious from casual inspection but if not it usually
can be made obvious by a warning on the label or by descriptive literature
included in the package in which the product is sold. In effect, the law
enforces an implicit disclaimer when the costs of information to the con­
sumer are low . . . 224

According to Landes and Posner, this common law "solution is con­
sistent with the economics of the problem." 225

Although Landes and Posner suggest that they have provided fur­
ther specific evidence in support of their positivist claims, they have in
fact created a significant tension. 226 On one hand, they argue that
courts should not enforce disclaimers against personal injuries, be­
cause "product failures that cause serious personal injuries are ex­
remely rare, and the cost to the consumer of becoming informed
about them is apt to exceed the expected benefit." 227 On the other

223. LANDES & POSNER, supra note 7, at 283.
224. Id. at 283-84 (emphasis added).
225. Id. at 284. Unhappily, Landes and Posner have received no support and much criticism
for their position. At the most general level, critics have brushed their arguments aside for rea­
sons that appear largely unrelated to the arguments themselves. The now-common refrain is that
Landes and Posner are so committed to reaching conclusions that confirm their positivist hy­
pothesis — that tort law is best explained as if the judges were trying to promote efficient re­
source allocation — that they have indiscriminately adopted whatever arguments will get them
there. LANDES & POSNER, supra note 7, at 1. Epstein, for example, writes: "Landes and Posner
reach [their] position only because they are so wedded to their 'positive' theory that the common
law rules of liability must be 'efficient' . . . ." Epstein, supra note 101, at 2205; see also Priest,
supra note 29, at 23 ("The efficiency issue has been treated as seriously as it has only because of
excessive attention to the extravagant Posner-Landes empirical claims of the efficiency of the
law."); HUBER, supra note 8, at 6 (disparaging Posner's role in the products liability revolution,
gave rise to the liability crisis). So too Huber writes:
An economist, it has been said, is someone who observes what is happening in practice and
goes off to study whether it is possible in theory. The new tort economists,[ Landes and
Posner plainly central among them,] were entirely true to that great tradition. Indeed, they
-carried it a step forward, concluding that the legal revolution that had already occurred was
not only possible but justified and necessary. Mustering all the dense prose, arcane jargon,
and elaborate methodology that only the very best academic economists muster, they set
about proving on paper that the whole new tort structure was an efficient and inevitable
reaction to failures in the marketplace.
Id. Without exception, other legal economists disagree with Landes and Posner's conclusion that
both the historical development of tort law and its current doctrinal structure are in the main
consistent with efficiency. Landes & Posner, supra note 12, at 535. Consequently, but unfortu­
nately, the arguments underlying Landes and Posner's conclusions have been given little if any
credence.

226. Others have offered different criticisms of Landes and Posner's view of products liability
law. See, e.g., Patricia M. Danzon, Comments on Landes and Posner: A Positive Economic An­
alysis of Products Liability, 14 J. LEGAL STUD. 569, 572 (1985); Epstein, supra note 101, at 2204-
05.

227. POSNER, supra note 10, at 166, and text accompanying note 218.
hand, they argue that the immutability of the liability standard should be merely a rebuttable presumption and that, accordingly, courts should not hold manufacturers liable for the accidents their products cause when consumers are informed of product risks. According to Landes and Posner, consumers are adequately informed when the danger is obvious — when there is a “warning on the label” or “descriptive literature included in the package in which the product is sold.”

A warning or descriptive literature constitutes an “implicit disclaimer” that courts should enforce. This analysis raises but fails to answer the question of why consumers would ever bother to become informed of a product’s risks through the product’s warning or descriptive literature, when becoming informed of the product’s risks by reading the product’s warranties and warranty disclaimers (“even if [the disclaimer] is clear and conspicuous”\footnote{Landes & Posner, supra note 7, at 283.} \footnote{Id. at 281.} \footnote{Id. at 297.} \footnote{Id. at 297.} ) would not be worthwhile for them.

Landes and Posner seem to anticipate this criticism, arguing that “[i]t is not inconsistent to allow warnings to defeat liability but refuse to enforce disclaimers of liability.”\footnote{Id. at 297.} They explain: “The warnings come into play only when the product is highly dangerous, either to all users or to a defined class of users. The benefits of information to consumers are very great in such a case, and consumers can therefore be expected to make some investment in absorbing the information conveyed by the manufacturer.”\footnote{Id. at 297.} But this defense is not persuasive.

To begin with, warnings may in some instances act as implied disclaimers even when the product is not highly or obviously dangerous. Manufacturers use warnings (and courts sometimes enforce them as implied disclaimers in at least some jurisdictions) for products spanning a significant range of riskiness.\footnote{See, e.g., Sliman v. Aluminum Co. of Am., 731 P.2d 1267 (Idaho 1986) (manufacturer of aluminum twist-off soft drink bottle caps held liable for failing to warn ultimate consumer that cap could blow off forcibly and cause injuries), \textit{cert. denied}, 486 U.S. 1031 (1988); Moran v. Fabergé, Inc., 332 A.2d 11, 20 (Md. 1975) (allowing plaintiff to recover against perfume manufacturer for explosion caused by plaintiff’s pouring perfume over a lit candle; perfume held defective for failure to warn of flammability hazard).} Thus, to the extent that warnings are used or could be used for low-risk products, the law is inefficient, either because it treats warnings as implied disclaimers of personal injury liability or because it does not enforce explicit disclaimers of personal injury liability.

Moreover, even if manufacturers used warnings only for “highly
dangerous products," it is not clear why consumers would have any incentive to look at the warnings. Before making the investment to determine whether a product is dangerous, consumers, according to the logic of Landes and Posner's argument, have to know that the product is highly dangerous. Otherwise, they will not know that the "benefits of information" "are very great." If a consumer does not know that the product is particularly risky, then she has no incentive "to make some investment in absorbing the information conveyed by the manufacturer." In short, Landes and Posner's argument is circular: A product's risk is obvious when consumers know the product is risky; consumers know a product is risky when manufacturers warn them that the product is risky; and consumers will read manufacturers' warnings when the consumers know that a product is risky. Landes and Posner never explain how consumers know a product is dangerous in the first place. Even if consumers did know (from some exogenous source) that a product was dangerous, a warning would only tell consumers what they already knew. Consumers either do not know that a product is risky, in which case they will have no incentive to find out, or they do know that a product is risky, in which case they have little to learn. Warnings, in either case, have no effect.

Landes and Posner may imagine that product warnings provide consumers with specific details about the product's danger when the consumer already perceives that the product is dangerous in some general sense. But Landes and Posner offer no evidence to suggest that product warnings are, as an empirical matter, particularly specific or informative. Even if they were, the fact remains that, the more specific or detailed a warning becomes, the more remote each specific risk associated with the product's overall risk becomes, and the less likely that consumers will perceive the product as risky. That is, the benefits of reading a warning decrease as the warning's specificity increases. Moreover, the more detailed the warning, the greater the costs of reading and absorbing it. In short, no matter what type of product or risk is involved, Landes and Posner offer no plausible argument to sug-

233. See Viscusi, supra note 117, at 142 ("If the hazards are widely known or readily apparent, warnings have no new information to convey."). Another problem with Landes and Posner's efficiency analysis is that it neglects to consider the fact that under any default standard less strict than absolute manufacturer liability, manufacturers will not have an incentive to warn consumers against all product risks. See infra section IV.C.1.

234. The federally mandated warnings that cigarette manufacturers are required to provide, for example, do not seem especially informative. See Debra Jones Ringold & John E. Calfee, The Informational Content of Cigarette Advertising: 1926-86, 8 J. PUB. POLY. & MARKETING 1 (1989).

235. See Viscusi, supra note 117, at 139-40 (describing problem of information overload); id. at 143 ("Detailed examination of the information that individuals retain from hazard warnings indicates that even with very detailed and well-designed warning labels, individuals can seldom
gest why courts should treat warnings, as implied disclaimers of liability for personal injury, any differently than they treat explicit disclaimers. If warnings can effectively communicate information to consumers about a product's risks, then explicit disclaimers of liability against those risks should do so equally well.236

Furthermore, Landes and Posner's reliance on warnings as a justification for absolute consumer liability seems to disregard the justification they provide for the position they take on the liability-standard dimension. When justifying strict liability, they argue that the price mechanism acts as a powerful source of information for both consumers and manufacturers.237 However, they make no mention of the price mechanism when justifying the court's use of absolute consumer liability. With regard to strict liability, they write:

It is true that to a perfectly informed consumer the price increase resulting from strict liability would not be a net cost; it would just offset the benefit [the consumer] would be receiving from shifting to the manufacturer the cost of injuries caused by the product. But now recurs the point that it does not pay consumers to obtain information about small product risks. Suppose that in making his purchasing decisions the consumer will treat minute risks as zero risks (that is, they will not affect his decisions) . . . simply because it does not pay to compute and try to avoid extremely remote contingencies . . . . Then in a world of no liability, output will exceed the optimal output . . . and the manufacturer will fail to take due care. Shifting to strict liability will result in a price increase to cover the manufacturer's expected products liability costs, and the higher price will be perceived by the consumer as an increase in the full cost of the product . . . and there will be some substitution away from the product. Thus . . . the information about risk is impounded in the higher price and "communicated" to the consumer in a form that he can understand without investing in costly information. Finally, because the manufacturer aggregates the expected accident costs of all his present and future customers, an imperceptible cost to the individual consumer becomes a noticeable cost to the manufacturer, inducing him to look for ways of making long-run improvements in safety.238

Landes and Posner's argument here, though sound, proves too much. The price mechanism, as they describe it, will communicate information to manufacturers and consumers no matter how risky the prod-

236. To put it another way, the question whether a liability standard is a default standard is separate from the question of what the necessary and sufficient conditions are to contract around a default. See infra note 340 and text accompanying notes 341-42. See generally Ayres & Gertner, supra note 15, at 121-23 (discussing the "default-immutable spectrum"). If opting out of the default liability standard requires enumerating the risks that a product poses, then Landes and Posner's distinction between warranties and warnings collapses.

237. See, e.g., LANDES & POSNER, supra note 7, at 287.

238. Id. at 293-94.
uct. Although Landes and Posner argue that warnings under an
absolute consumer liability standard will effectively communicate to
consumers the risks of highly dangerous products, they offer no expla-
nation for why the price mechanism under a strict liability standard is
not an equally or more effective means to the same end.239

In sum, although Landes and Posner’s arguments regarding the
effects of costly information are not without merit, the arguments do
not support their conclusion that the current products liability regime
is the most efficient.

b. W. Kip Viscusi.

Sharing Landes and Posner’s point of departure, Professor Viscusi
argues that unregulated consumer product markets are inefficient and
that “[t]he purpose of products liability is to fill the gaps left by mar-
ket imperfections and to replicate the incentives that would have been
generated had markets been functioning perfectly.”240 According to
Viscusi, “the chief inadequacy of the market is inadequate risk infor-

239. Landes and Posner try to defend absolute consumer liability by illustrating that under
strict liability high-risk consumers will be able to buy products at the same price as low-risk
consumers and that strict liability could therefore lead to an inefficient allocation of resources.
Id. at 295-96.

But Landes and Posner’s defense creates more problems than it solves. First, even if strict
liability could lead to an inefficient allocation of resources, the same would be true for all types of
products — high- and low-risk products alike. Yet Landes and Posner ignore this potential
problem when they defend strict liability for low-risk products.

Second, their argument that strict liability forces low-risk consumers to cross-subsidize high-
risk consumers is, although they do not style it as such, an argument about the insurance effects
of strict liability. Indeed, Huber, Epstein, and Priest each consider this same phenomenon to
represent one of the most significant adverse insurance effects of strict liability. In those scholars’
views, the heterogeneity of consumer product risk pools — in other words, the inability of manu-
facturers to segregate high-risk from low-risk consumers — is chiefly to blame for the recent
insurance “crisis.” HUBER, supra note 8, at 133-52; Priest, supra note 9, at 1550-63. But see
Croley & Hanson, supra note 4, at 29-38 (arguing that the phenomenon does not plausibly ex-
plain the insurance crisis); Hanson & Logue, supra note 11, at 153-58 (arguing that manufactur-
ers can segregate consumers into reasonably narrow risk pools). Landes and Posner thus cannot
claim to have tested, much less confirmed, their hypothesis that the common law is efficient when
they have disregarded the very evidence that most scholars believe proves the contrary.

Moreover, Landes and Posner emphasize that the vitality of their positivist approach depends
on their fully excluding insurance considerations from their analysis. See LANDES & POSNER,
 supra note 7, at 22, 273; Landes & Posner, supra note 12, at 536. By employing an insurance
argument, Landes and Posner threaten their economic theory by substituting rationalization for
prediction. That is, Landes and Posner may have unwittingly undermined their positivist project
by relying on insurance considerations to justify the exceptions courts have made to the general
rule of strict liability.

Finally, the cross-subsidization problem that Landes and Posner describe as existing under
strict liability would also exist under the absolute consumer liability standard that they attempt
to defend. One difference is that, under an absolute consumer liability standard, the problem
would occur in first-party insurance pools instead of in the pools of consumers who buy the
products. The problem is the same in both situations. See Hanson & Logue, supra note 11, at
137-41. Indeed, it might be greater in first-party insurance pools. See id. at 137-59, 164-66.

240. VISCUSI, supra note 117, at 66.
mation". Specifically, information and transactions costs make complete internalization of the costs of risk impossible. The resulting risk-reduction incentives exist at less than efficient levels, giving rise to a greater than optimal number of accidents."

Although Viscusi's general goal is to replicate the incentives of a perfectly functioning market, he focuses primarily on consumers' role in reducing product accidents. Explaining the need for increased reliance on product warnings, he writes: "What is most needed . . . is a general recognition that the consumer must play an active role in promoting product safety." The goals of Viscusi's reform proposals therefore include shifting "greater responsibility for safety to the consumer of a product so that the overall scope of liability will be diminished." The attempt to inform consumers so that they can play an active role in accident prevention underlies much of Viscusi's reform project.

1. Liability-standard dimension. Viscusi focuses almost entirely on accidents caused by defects in the design of a product. For these design defect cases, Viscusi prefers different standards for two different types of risks: those risks for which product warnings would be effective (warnable risks), and those for which product warnings would not be effective (unwarnable risks). For unwarnable risks, he advocates a negligence standard. With Michael Moore, Viscusi explains: "The liability test should be simply whether the firm has provided an efficient degree of product safety . . . . In place of the current strict liability standard, we would substitute an elaborate negligence test defined in economic terms." In a first-best world, regulators would

241. Id. at 64.


243. Viscusi, supra note 117, at 212.

244. Id. at 212-13; see also id. at 9 ("Ideally, warnings should shift more of the responsibility for product safety from the producer to the user."). 12 ("Product safety is a shared responsibility, not just a corporate responsibility."). 124 ("The chief method of bringing consumer habits into the picture is the hazard warning . . . .").

245. Following Viscusi's lead, we will focus primarily on his proposal to reform tort law's approach to design defect cases. With respect to the less significant class of injuries caused by products that fail a manufacturer's own standard of design, manufacturing defects, Viscusi recommends retaining § 402A's strict liability standard (somewhere between Box 6 and Box 8). Id. at 11.

246. Although Viscusi does not say so explicitly, the set of products that pose warnable risks seems quite small, consisting of products that pose risks of which consumers are unaware and of which warnings can make consumers aware without being alarmist. See id. at 134-35, 142-46; see also infra text accompanying notes 267-68.

247. See Viscusi, supra note 117, at 136.

248. W. Kip Viscusi & Michael Moore, Rationalizing the Relationship Between Product Lia-
“apply” the negligence test to manufacturers by prescribing product design standards.249 Until reformed regulatory agencies supplant tort law, however, Viscusi would have courts apply his negligence standard to unwarnable product risks. For warnable risks, Viscusi would adopt absolute manufacturer liability.250

ii. Mutability dimension. For unwarnable risks, Viscusi would make the negligence standard mandatory. As for warnable risks, Viscusi would allow manufacturers to contract out of absolute manufacturer liability through product warnings. However, just as Viscusi would prefer that administrative agencies rather than courts enforce the negligence standard, he would also prefer that agencies rather than courts devise and prescribe effective warnings. Where courts perform this function, manufacturers would still have to pass Viscusi’s rigorous risk-utility negligence test to avoid liability. That is, manufacturers could contract out of Box 7, but only as far as Box 4. In urging courts to adopt his risk-utility analysis rather than absolute consumer liability (where manufacturers have provided court-approved warnings), Viscusi is proposing a reform that is “incremental in character... modest rather than revolutionary.”251 Where agencies rather than manufacturers and courts devise and prescribe product warnings, however, Viscusi would allow the liability standard to be fully mutable. That is, manufacturers could, through product warnings, contract out of absolute liability completely without being subject to a court’s risk-utility test.252

The goal of all of Viscusi’s proposed reforms, recall, is to overcome the problem of imperfect consumer information. Viscusi’s warning requirement would do so by inducing manufacturers to disclose information about a product’s risk of preventable and unpreventable accidents.253 Based on that information, consumers would adjust their
care and activity levels. The purpose of Viscusi's risk-utility test is to ensure that manufacturers adjust their care levels to prevent all initially preventable accidents. As Viscusi recognizes, however, the risk-utility test would be redundant if warnings were fully effective at informing consumers. That test is necessary only because, Viscusi must believe, manufacturers' warnings will not ensure that consumers are completely informed. In theory, under Viscusi's approach, all justified care- and activity-level adjustments would be made, replicating the incentives of a perfectly functioning market. Upon careful scrutiny, however, Viscusi's proposals seem unlikely either to mitigate the problem of imperfect information or to affect consumer behavior substantially.

According to Viscusi, "most product risks tend to be comparatively small, and in the typical case in which there is some (imperfect) awareness of the risk, individuals are likely to overestimate these risk levels." Where consumers overestimate risks, "[i]ncentives for safety generated for firms will consequently be too great, rather than too small." Therefore, "there is no need for additional intervention through tort liability." If warnings were provided for already overestimated risks, warnings would only exacerbate the problem. As Viscusi explains, "the very presence of a risk warning" may "boost the consumers' risk perception in an adverse manner." For most product risks, therefore, a warning requirement would, if anything, make a bad situation worse.

Warnings will be helpful, if at all, for only a minority of product risks. According to Viscusi, this class of risks "includes those posed by pesticides, food additives, many pharmaceutical products, and long-term carcinogenic risks." Viscusi's examples, however, seem inapposite. First, it is not clear — and Viscusi offers no evidence — that consumers are unaware of the fact that such products pose

Robert Gertner termed a "penalty default." See supra note 208; infra notes 420-22 and accompanying text.

254. Viscusi's explicit goal, recall, is to encourage consumers to change their behavior. See supra note 244 and accompanying text; see also VISCUSI, supra note 117, at 156.

255. See VISCUSI, supra note 117, at 146 (explaining that where warnings are effective the market will, in effect, perform its own risk-utility test).

256. See id. at 134-39.

257. Id. at 64; see also id. at 136 (explaining that warnings are not needed where risks are visible or publicized).

258. Id. at 64.

259. Id. at 65.

260. Id. at 136-37.

261. Id. at 136, 142.

262. Id. at 136.
risks. Moreover, many if not most of those risks will probably be relatively small. That is a problem, because Viscusi wants manufacturers not to warn consumers about small risks. The costs to manufacturers of warning consumers of such risks will often exceed the benefits, especially when more detailed warnings lead to “information overload.” Furthermore, as Viscusi recognizes, it is often irrational for consumers to take account of small risks or for them to read, process, and heed product warnings of such risks. Accordingly, Viscusi’s warning requirement would fail to inform consumers of a substantial subset of risks of which they are not already aware. The only risks for which Viscusi’s warning proposal may have some beneficial effect are significant risks that are not initially preventable and of which consumers are otherwise unaware. Because the number of warnable risks may well be small, the game may not be worth the candle.

Even assuming that Viscusi’s proposals for how courts should approach warnings would improve consumers’ information, why he goes further to propose that courts adopt a rigorous risk-utility negligence test as well is not entirely clear. For risks that are warnable, effective product warnings presumably would communicate to consumers whatever information they needed to know. For risks that are unwarnable, it is not clear why regulation is justified. After all, Viscusi argues that most product risks tend to be small and that consumers tend to overestimate small risks, in which case market incentives overdeter. In any event, Viscusi must believe that there remains some informational imperfection — whether due to (1) warnable risks for which warnings are not fully effective, (2) unwarnable risks that consumers underestimate, or (3) possibly Viscusi’s doubt that courts can competently distinguish between warnable and unwarnable risks — that warrants his risk-utility test. This raises the question whether his proposed risk-utility test would accomplish his deterrence goals, which seems unlikely for several reasons.

First, even assuming courts could successfully implement Viscusi’s elaborate negligence test, consumers would still have no incentive to

263. Our empirical hunch, for whatever it is worth, is that those products fall within the class of product risks of which consumers are aware and, assuming Viscusi is correct, that consumers therefore overestimate.

264. See id. at 83, 151; see also Schwartz, supra note 87, at 841 (“firms should not warn against slight risks at all”).

265. See infra text accompanying notes 423-24.

266. VISCUSI, supra note 117, at 83, 138-39, 148-49; see also supra note 220 and accompanying text.

267. See supra text accompanying note 258; VISCUSI, supra note 117, at 64, 136.
increase their care levels in response to residually preventable risks, or decrease their activity levels in response to unpreventable risks, given that, by hypothesis, consumers are uninformed of those risks. 268

Moreover, with respect to initially preventable accidents, many legal economists have argued that courts cannot successfully implement a rigorous cost-benefit negligence analysis. 269 Viscusi acknowledges that "courts are not well suited to resolving product design questions." 270 But he offers no defense to the criticism "that a comprehensive risk-utility analysis is too difficult for judges and juries to undertake and that making societal benefit and cost decisions regarding product safety is beyond their competence." 271 Viscusi responds that, although "[s]uch criticisms are not without foundation, . . . the solution is not to establish a simpler but less appropriate test for ascertaining product defects," 272 But Viscusi never explains why his approach provides the optimal balance between simplicity and

268. See LANDES & POSNER, supra note 7, at 293-94; Hanson & Logue, supra note 11, at 175-79; Schwartz, supra note 7, at 376-78.

The problem of imperfect consumer information may plague Viscusi's proposal in other ways too. For instance, under Viscusi's proposed regime, manufacturers would be liable for initially preventable design-related accidents, but consumers would not always know whether a manufacturer was liable unless they brought a claim. See Croley & Hanson, supra note 4, at 17 (explaining that not just the liability rule, but also the litigants' need for information to determine the application of a liability rule, often necessitates litigation). Costly false positives and false negatives would occur as injured consumers attempted to litigate invalid claims and failed to litigate valid claims. To the extent that some consumers injured in initially preventable accidents did not make claims due to, for example, inadequate information about their legal prospects or prohibitive costs of litigation, manufacturers would have insufficient incentive to take optimal precautions. On the other hand, to the extent that injured consumers litigated their claims in order to find out whether they had valid negligence claims (that is, whether the injury was initially preventable), one of the purported advantages of negligence over strict liability or absolute manufacturer liability — fewer cases litigated — would disappear. Of course, this criticism applies to all scholars who recommend a standard tougher than absolute consumer liability or less strict than absolute manufacturer liability (although consumers must know whether a product caused an injury even under the latter). This criticism seems especially applicable to the proposals of Viscusi and Priest because they call for an elaborate cost-benefit standard. Consumers are unlikely to have the requisite information or (even assuming they had the information) the sophistication to conduct the cost-benefit analysis for themselves.

269. Priest and Viscusi both clearly favor a cost-benefit negligence regime, and both believe that courts have employed the wrong negligence test. Accordingly, both urge courts to adopt their more rigorous negligence formulations. Schwartz agrees that courts have applied an inefficient negligence test but argues that courts are simply incapable of applying a negligence rule that will yield efficient outcomes. See Schwartz, supra note 7, at 386-88; see also Croley & Hanson, supra note 4, at 94-96; supra sources cited in note 206. Schwartz prescribes strict liability in part for that reason. See supra note 206 and accompanying text. Neither Priest nor Viscusi has attempted to defend his proposals against Schwartz' criticisms of negligence. Similarly, these scholars have not offered a persuasive defense of negligence against the argument that a negligence standard fails to optimize activity levels. See, e.g., COOTER & ULEN, supra note 8, at 368-69; SHAVELL, supra note 9, at 25; see also Croley & Hanson, supra note 4, at 68-75 (criticizing Priest on this basis).

270. VISCUSI, supra note 117, at 212.

271. Id.

272. Id.
appropriateness. What is more, Viscusi does not defend his proposal against alternative reforms of the tort system. Instead, he simply concedes that courts are ill equipped to conduct cost-benefit analyses, which is tantamount to conceding that his proposed risk-utility test may have little beneficial effect.

Because Viscusi recognizes the inherent, insuperable limitations of the tort regime he proposes, his first-best regime is one in which courts would assume a residual role, and administrative agencies a primary role, in the regulation of consumer product risks. He writes: "[W]e should recognize the limited competence of the courts and attempt to shift the task of promoting product safety to those institutions that are better equipped to handle the necessary societal tradeoffs" — administrative agencies.273 And, ideally, administrative agencies instead of courts could assess the adequacy of warnings and prescribe warning requirements for manufacturers.274 Ideally, administrative agencies instead of courts could also assess the adequacy of alternative product designs and prescribe design standards for manufacturers.275 In short, Viscusi's ultimate response to the limitations of his tort proposal is that those limitations simply underscore the need for administrative regulation to govern both warnings and product designs — that is, administrative regulation for both dimensions of products liability.

One immediate problem with that response, however, Viscusi also recognizes: administrative regulation is currently ineffective, and how to get from the current administrative regime to the reformed regime he hypothesizes is not at all clear.276 Viscusi himself has identified many of the specific ways that administrative regulation can be ineffective.277 As he points out, "[the regulatory] process is subject to the same political forces that drive other types of government action."278

273. Id. at 212.
274. Id. at 155-56 (explaining proposal for a national warnings policy).
275. Id. at 120 ("The safety incentives of products liability are dwarfed by those achievable through regulation."), 131 ("tort system should be subsidiary" to other institutions), 210 (other institutions should perform "the brunt of the task of promoting safety").
276. Viscusi asserts without explanation or argumentation that "[a]genties can resolve [their] problems more easily than the problems associated with both tort liability and social insurance can be resolved." Id. at 122-23.
Further, administrative regulation "often involves substantial delays." Regulators can be both underzealous — "[n]ot all product risks are addressed by regulation" — and overzealous — when regulators "go beyond the efficient level of precautions in setting the risk level." Finally, Viscusi argues that regulatory approaches have wrongly "emphasized the role of technological solutions as opposed to behavioral ones." Even according to Viscusi's own assessment of administrative regulation, therefore, his proposal would not necessarily bring us any closer to replicating the incentives of a perfectly functioning market.

Assume for the sake of argument that administrative regulation could be effectively reformed to cause agencies to devise and prescribe optimal warnings and optimal design standards. What kind of "behavioral solutions" would the world of reformed administrative agencies produce? Unfortunately, even in the first-best world of reformed administrative regulation, Viscusi's proposals appear capable neither of overcoming the market failure that he believes justifies regulation in the first place — imperfect consumer information — nor of avoiding the shortcoming he believes characterizes current tort-oriented approaches to regulation — the failure to affect consumers' behavior.

First of all, assuming that regulators could always adopt and prescribe optimal product warnings, those warnings still would not render consumers fully informed. That is, optimal warnings are not fully informative warnings, as Viscusi himself explains. Given consumers' propensity to overestimate small risks they are aware of as well as risks "brought to their attention," warnings require delicate tradeoffs involving the quantity and the format of information presented in warnings. Viscusi proposes that regulators, rather than manufacturers and courts, perform those tradeoffs, on the grounds that regulators are better equipped to do so. But, as Viscusi explains, even the best warnings are helpful only for certain kinds of product risks and only for conveying a certain amount of information. Warned consumers who lack adequate information about residually

279. Id. at 119. Because of delays in the appointment of a third Commissioner, the Consumer Product Safety Commission did not even convene, let alone adopt any safety standards, for almost one year, from December 29, 1988, to December 12, 1989, following the 1988 presidential election. Telephone Interview with Rochelle Hammond, Office of Executive Secretary, Consumer Product Safety Commission (July 20, 1990).

280. VISCUSI, supra note 117, at 121.

281. Id. at 119.

282. Id. at 123.

283. See supra notes 257-61 and accompanying text; infra notes 423-26 and accompanying text.
preventable accident risks will not adjust their care levels accordingly, and warned consumers who lack adequate information about unpreventable risks will not adjust their activity levels accordingly.

Second, assuming that regulators always prescribed optimal design standards and manufacturers complied perfectly, consumers would still be uninformed about the risks of residually preventable and unpreventable accidents. Because in the first-best world manufacturers would not be liable so long as they complied with regulatory designs — according to Viscusi compliance with regulatory design standards should be exculpatory — manufacturers would have incentives not to inform consumers about the risks of residually preventable or unpreventable accidents. In the absence of such information, consumers would have no reason to adjust either their care levels or their activity levels. Thus, in the world of reformed administrative regulation, the goal animating Viscusi's proposals would not be served.

As with other products liability scholars, then, the position Viscusi takes in one dimension of the Products Liability Matrix is in tension with the position he takes in the other. For unwarnable risks, he would not allow contracting out of a risk-utility test or regulatory design standards, on the grounds that consumers are uninformed. But if consumers are uninformed, it is not clear why Viscusi inhabits Row 2 rather than Row 3 or 4. Similarly, for warnable risks, he begins in Box 7 but then is willing to allow contracting back to Box 4. He allows this even though the warnings manufacturers supply to contract out of Box 7 will not fully inform consumers, and even though the risk-utility test and design standards to which manufacturers are subject in Box 4 will not overcome the problem of imperfect consumer information.

c. Susan Rose-Ackerman. Professor Rose-Ackerman also advocates increased reliance on administrative regulation. Like Viscusi, Rose-Ackerman argues that tort law could be employed as a "complement" to administrative regulation, though she is slightly less equivocal in calling for the abolition of tort law. Unfortunately, Rose-Ackerman devotes little attention to explaining why regulation in any form is necessary. Offering no direct challenge to the contractari-

284. See Viscusi, supra note 117, at 128, 212.

285. Indeed, Viscusi's first-best world may make matters worse, because in it compliance with regulatory designs is exculpatory, whereas in the second-best world manufacturers must also provide warnings to avoid liability for warnable risks. In other words, although administratively authored warnings may be superior to manufacturer-authored (and court-approved) warnings, in the first-best world consumers will get neither whenever manufacturers comply with regulatory designs.

286. Rose-Ackerman, supra note 124, at 82-83.
ans,\textsuperscript{287} she remarks simply that “external effects and poor information cause serious market failures that only regulation can effectively address.”\textsuperscript{288}

In any case, Rose-Ackerman clearly favors administrative regulation over tort regulation of product risks,\textsuperscript{289} although she believes the former is itself in need of reform, and she nowhere addresses the possible shortcomings of even a reformed system of administrative regulations.\textsuperscript{290} Her view of tort law's proper role depends on what the underlying administrative landscape looks like. She considers three types of administrative regulation: command-and-control regulation, performance-based standards, and incentive strategies.\textsuperscript{291}

\textsuperscript{287} She instead confines her analysis to those situations where contracts, by assumption, do not work:

Of course, some risk situations may best be regulated by enforcing private contracts, and some instances of social regulation arguably fit into that category. This chapter, however, focuses on situations in which private contracts fail to incorporate all costs and in which tort suits are, therefore, the only feasible common law alternative to statutory regulation. Rose-Ackerman, \textit{supra} note 124, at 82.

\textsuperscript{288} \textit{Id.} at 100; \textit{see also} SUSAN ROSE-ACKERMAN, RETHINKING THE PROGRESSIVE AGENDA 7 (1992) [hereinafter ROSE-ACKERMAN, RETHINKING] (“Uninformed consumers may purchase products that cause health problems or do not perform as advertised.”). Discussing “occupational health and safety,” Rose-Ackerman sheds some, but not much, additional light on this issue, writing that “people tend to be poorly informed about actual levels of risk. Many studies have documented these misperceptions and the general tendency to overestimate the probability of events that are beyond one's control while underestimating other risky possibilities.” Susan Rose-Ackerman, \textit{Progressive Law and Economics — And the New Administrative Law}, 98 YALE L.J. 341, 355 (1988) (footnote omitted) [hereinafter Rose-Ackerman, \textit{Progressive Law}].

\textsuperscript{289} Rose-Ackerman’s discussion to some extent considers tort law in general, not just products liability. Thus, conclusions about her views on products liability must be drawn with caution. Furthermore, Rose-Ackerman’s position on the most desirable products regime is hard to pin down because she focuses primarily on the distinctions and possible interrelationships between administrative and common law regulation, an important project in itself.

That recognized, however, it seems that, while Rose-Ackerman contemplates the possibility of residual roles for tort law in other contexts, products liability in her view presents an especially strong case for wholesale statutory displacement. \textit{See ROSE-ACKERMAN, RETHINKING, supra} note 288, at 121. Rose-Ackerman explains that, because the right to bring suit is “a well-entrenched social value,” and because many see the tort system “as a defense against the state despite the fact that some statutes . . . were adopted to benefit ordinary people by substituting neutral administrative determinations for biased courts and costly lawyers,” support for tort law “persists even when the logic of efficient risk control demands \textit{ex ante} regulation.” Rose-Ackerman, \textit{supra} note 124, at 85-86. Thus taking the persistence of tort law as given, Rose-Ackerman articulates how the tort system might be employed productively, rather than at cross-purposes to the administrative regime. \textit{See id.} at 86. She seems to suggest, however, that wholesale displacement of the tort system would be desirable if possible, at least in a world of reformed administrative regulation. \textit{See id.} at 82 (“I argue . . . that statutes should generally dominate so long as agencies can use rulemaking to shape policy. The trend to replace these more systematic regulatory techniques with case-by-case adjudication and product recalls should be resisted.”), 101 (“Under incentive-based administrative] schemes that require firms to pay for the damage they cause, statutes should preempt tort actions in order to avoid overdeterrence.”). Indeed, as to product risks in particular, her view may be that the only regulation necessary is a mandated warning requirement. \textit{See infra} text accompanying note 301.

\textsuperscript{290} \textit{See ROSE-ACKERMAN, RETHINKING, supra} note 288, at 119.

\textsuperscript{291} \textit{See generally} Rose-Ackerman, \textit{supra} note 124, at 95-98. Command-and-control regula-
erman, as is common among legal economists, most prefers incentive-based regulation, which gives the manufacturers the greatest leeway in choosing how to enhance safety, and she least prefers command-and-control regulation (which largely characterizes the current, unreformed administrative regime).

Were administrative agencies to adopt the incentive-based approach, then tort law, according to Rose-Ackerman, should be preempted altogether. Alternatively, if the administrative regime employed performance-based standards, Rose-Ackerman believes tort law should have one of two roles. Because of the significant evidentiary burdens of establishing compliance or lack of compliance with performance standards, recovery in tort could be based upon either the standard set by the regulatory agency (in which case tort suits would be barred until the regulatory agency found a regulatory violation), or absolute manufacturer liability. In either case, the court “need only assess damages, not compliance.”

i. Liability-standard dimension. Meanwhile, in the not-yet-reformed administrative regime, Rose-Ackerman argues that tort regulation can (but not necessarily should) be employed so as to complement administrative regulation: “[I]n policy areas that have not yet been reformed, a limited role remains for tort law or, at least, for private causes of action embedded in statutory schemes.” This, however, “would require substantial tort reform.” First, courts would need to adopt the same cost-benefit standards that are set by agencies and “apply them competently to individual cases.” Alternatively, were courts to employ an absolute manufacturer liability standard, they would need to find better methods than they presently employ of “determining [causation] and assessing damages.” Even then, however, tort law should serve largely a stopgap function, to be employed only until the appropriate agency acts.

According to Rose-Ackerman, a reformed tort system of this sort imposes specific output requirements on regulated firms. Performance-based standards tell firms what they must accomplish but leaves them to decide how best to do so. Incentive-based regulation requires firms to internalize the total costs of their activities, leaving firms to decide how to minimize those costs.

292. See id. at 97-98.
293. Id. at 96.
294. Id.
295. Id. at 101; see id. at 90-92.
296. Id. at 91.
297. Id. at 90.
298. Id. at 91.
299. Id. at 101.
might complement the unreformed administrative system in two ways: first, by serving as a supplementary enforcement system; second, by providing compensation. But, again, the tort system would serve these two functions only in a second-best administrative regime. In Rose-Ackerman’s view, other compensation mechanisms, including social and private insurance mechanisms, and enforcement devices, including a strengthened regime, are superior to those provided through tort law.

Where Rose-Ackerman locates herself in the Products Liability Matrix thus depends on the type and extent of administrative regulation that exists. Her first preference seems to be the expansion of incentive-based administrative regulation and the abolition of tort law (Row 1). To the extent that administrative regulators employ performance-based or command-and-control standards, however, Rose-Ackerman suggests a possible residual role for tort law and the imposition of a negligence or an absolute manufacturer liability standard.

ii. Mutability dimension. On the mutability dimension, Rose-Ackerman seems to suggest that manufacturers should be permitted, through product warnings, to contract out of liability. In her words, “[a] policy that requires suppliers to provide warnings . . . may obviate the need for compensation by notifying buyers of the risks they face.” Thus, Rose-Ackerman’s view of warnings creates a now-familiar tension in her more general position regarding the need for regulation. If warnings can make consumers aware of the risks products pose, then there is no apparent need to regulate consumer product markets beyond basic warning requirements. As with Landes and Posner and Viscusi, then, Rose-Ackerman’s positions in the two dimensions of products liability are somewhat in tension with each other. She takes the position that product warnings might overcome information problems in consumer product markets. On the other hand, she clearly favors a more robust regulatory regime than just administratively prescribed product warnings. But if she believes that more administrative regulation is necessary in order to protect consumers from product risks, her reasons for allowing manufacturers to

300. See id. at 91 (“True strict liability would convert manufacturers of such risky products as drugs and household chemicals into insurers of the consumers of their products even where the consumers can bear the risk more cheaply and would prefer to do so in return for a lower price.”), 100 (“[R]etaining conventional tort actions in the face of regulatory statutes can undermine the behavioral impact of statutes. Other solutions must be found to the problem of providing compensation.”).

301. Rose-Ackerman, supra note 124, at 82. Insofar as Rose-Ackerman’s warning requirement would be exculpatory, she might be placed in Box 7. See infra notes 420-22 and accompanying text (explaining why warning requirements translate to a Box 7 regime).

302. See supra text accompanying notes 228-36 (Landes and Posner) and 253-55 (Viscusi).
avoid liability through product warnings are unclear.  

d. Stephen Sugarman.

i. Liability-standard dimension. Professor Sugarman goes whole hog: He argues that tort law should be "do[ne] away with." According to Sugarman, no standard of liability can have significant beneficial deterrence consequences. Indeed, personal injury law, if anything, "generates more perverse behavior than desired safety . . . ." Thus, Sugarman takes as his starting point the position that manufacturers should not be liable to consumers for product-caused accidents (which places him in Row 1). In this respect, his view resembles Huber's and Epstein's.

ii. Mutability dimension. Unlike his contractarian counterparts, however, Sugarman argues that consumer product markets are subject to significant market failures. Like his fellow regulators, he largely fails to delineate them. According to Sugarman:

It is widely thought that consumers today do not have enough information to evaluate limitations on liability and waivers of tort rights that might appear in standard form contracts for the purchase of consumer goods. Indeed, the difficulty of properly informing consumers in such contexts is so great that courts quite rightly will not generally enforce such limits.

303. Additionally, while Rose-Ackerman writes that products liability exemplifies the failure of the common law system to regulate effectively, ROSE-ACKERMAN, RETHINKING, supra note 288, at 10, 26, she does not consider institutional reforms that might render the tort system more effective. Instead, she advocates displacing tort regulation with administrative regulation, notwithstanding the fact that the latter has, as she seems to recognize, not proved effective in regulating such risks. See id. at 10 ("[C]onservative agency heads who wish to minimize the number of major rules and delay those they cannot avoid considering . . . [T]he Consumer Product Safety Commission all but abandoned rulemaking."). In her preference for agency standard-setting, Rose-Ackerman, like Viscusi, stands in the somewhat awkward position of defending great reliance on administrative regulation in the era of deregulation. Rather than urge courts to rely on existing administrative agencies, she must urge courts to defer to yet-unknown administrative means of generating efficient regulations. Again, there is no reason to be confident that administrative regulation can be reformed any more easily to approximate that ideal than can tort regulation.

304. SUGARMAN, supra note 151.

305. Most of Sugarman's attention is focused on finding a superior means of compensating accident victims as well as anyone else who is injured or ill; he focuses only secondarily on deterrence. Sugarman's compelling arguments in favor of developing superior methods of compensating the injured and ill stand independent of his characterization of tort law as a mechanism for deterring injuries and illness. One might well agree that this country should adopt a national health system that made medical care available to all. At the same time, one might agree that tort law should be maintained in order to minimize the number of injuries and illnesses requiring medical care. For evidence of the deterrence effects of products liability, see Croley & Hanson, supra note 4, at 84-90.

306. SUGARMAN, supra note 151, at xvi; see also id. at 3 ("There is, unfortunately, little reason to believe that personal injury law today actually serves an important accident-avoidance function. Worse, to the extent that it does influence behavior, there is good reason to think that much of the result is socially undesirable.").

307. Id. at 206-07.
Thus, Sugarman does not appear to believe that a free-contracting regime would generate efficient results; he appears, in other words, to be recommending a shift to Box 2.

To mitigate the adverse effects of market failures, Sugarman recommends increased reliance on administrative regulation.\textsuperscript{308} Much like Viscusi and Rose-Ackerman, Sugarman would have society rely almost exclusively on administrative agencies: “I do not advocate that society abandon behavior control, but rather that new nontorts approaches be tried.”\textsuperscript{309} Sugarman concedes that “[g]reater efforts by regulatory agencies will not rid our society of unreasonably dangerous conduct and products” and that “many of the shortcomings of our tort system as a deterrent apply to administrative regulation as well.”\textsuperscript{310} Nonetheless, he cannot imagine doing away with regulatory agencies as the central protectors of consumer safety: “[The] challenge lies rather in developing better techniques to make agencies more responsive and more effective.”\textsuperscript{311} Under Sugarman’s plan, agencies such as the Consumer Product Safety Commission and the National Highway Traffic Safety Administration would have increased powers to investigate, regulate, and penalize regulatory violators.\textsuperscript{312} Offering few details, Sugarman calls for “accident prevention through regulatory strategies, with the increased involvement of citizens, victims, and citizen groups” in order to make the agencies “more responsive and more effective.”\textsuperscript{313} In sum, Sugarman’s proposal seems to be that courts should shift to Box 2 and that administrative regulation should be enhanced to protect consumers from the inefficiencies of a free market in consumer product risks.

A closer examination of Sugarman’s work, however, reveals that

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\textsuperscript{308} \textit{Id.} at xviii.
\textsuperscript{309} \textit{Id.} at 23.
\textsuperscript{310} \textit{Id.} at 153.
\textsuperscript{311} \textit{Id.} Sugarman’s discussion is revealing. First, the fact that he cannot imagine a world without regulation is further evidence that, in contrast to the contractarians, he does not believe that unregulated markets will yield optimally safe products or contracts. Second, the fact that Sugarman “cannot imagine” doing away with administrative regulation is hardly dispositive. Others may be able to. In any event, doing away with tort law might be just as unimaginable. An equally persuasive response to Sugarman’s critique of tort law might paraphrase Sugarman: “Tort law should not be done away with. Our challenge lies rather in developing better techniques to make tort law more responsive and more effective.” Sugarman writes: “The idea that tort law might deter . . . accidents seems to be very much wishful thinking to me.” \textit{Id.} at 24. Perhaps this is true, but Sugarman does not explain why his confidence in administrative regulation — typical of the regulators — is anything more than that. If administrative agencies do in fact have a comparative advantage at making causal determinations, as the regulators seem to believe, then perhaps the solution to the causation problem is to permit regulatory agencies to determine who caused an accident and then let courts take it from there.

\textsuperscript{312} \textit{Id.} at 156-59.
\textsuperscript{313} \textit{Id.} at 153.
his proposal is not easily located on the Products Liability Matrix. Like most of his fellow regulators, Sugarman not only fails to address any of the persuasive procontract and promarket arguments made by contractarians,314 but he also offers arguments that strongly suggest that he is himself a contractarian, notwithstanding his assertion that there are significant market failures and his recommendation that administrative regulation should fill the need for nonmarket behavioral control.

Surprisingly, Sugarman asserts that, as an empirical matter, firms rarely can do anything to reduce their liability costs through accident prevention efforts.315 Sugarman must therefore be arguing either that the market by itself will ensure optimal deterrence, in which case no enhanced role for regulation is necessary, or that some regulatory institution in addition to the market is needed to ensure optimal deterrence but that under the current liability regime manufacturers are, as an empirical matter, already making all cost-justified investments. If Sugarman believes the former, then society should not expend tremendous resources creating an administrative regime never before employed. If he believes the latter, then his claim that manufacturers currently can do very little to reduce their liability costs belies his conclusion that we should do away with tort law because it has little or no beneficial deterrent effect.

More puzzlingly, Sugarman at several points in his analysis reveals a faith in contract that seems incompatible with his claim that the market fails and his call for administrative regulation. Sugarman states that manufacturers should be permitted to contract out of the absolute consumer liability regime that he calls for. Under his proposed scheme, "contract law would continue to deal with consumer warranties, but no warranty would be construed to provide compensation for personal injury unless this were so stated explicitly. Such a warranty would become, in effect, an intentional insurance contract."316 Thus, Sugarman takes the seemingly irreconcilable positions that consumer product markets fail and that free contracting would be efficient.317

Elsewhere, Sugarman summarizes his reforms as follows:

314. See supra section III.B.1.
315. SUGARMAN, supra note 151, at 11.
316. Id. at 162. Sugarman is confident that no manufacturer would voluntarily offer insurance with its product and that no consumer would voluntarily pay for it. See id. at 35-49.
317. Although Sugarman does not specify the nature of the market failures that hamper consumer product markets, one possible problem may be that consumers overestimate product risks. See supra note 288. If so, then allowing consumers to contract for greater amounts of manufacturer-provided insurance would lead to inefficient contracts.
For the long run, I propose that...we eliminate tort remedies for accidental injuries,...and...build on existing regulatory schemes both to promote accident avoidance and to provide outlets for complaints about unreasonably dangerous conduct....For the shorter run, I propose some first steps that...would move us in the right direction for the long term. They include...reform by private contract....318

According to Sugarman, a "preaccident market in legal rights to bodily security...could correct many shortcomings of existing tort law."319 He argues that, if only courts would enforce the contracts against product-accident victims, then preaccident contracts could "clearly improve[] the position of both victims and injurers."320 Thus, throughout most of his book, Sugarman assumes that significant market failures justify some form of regulatory intervention in the market. Then, giving short shrift to these supposed market failures, Sugarman advocates an enhanced role for contract to overcome the shortcomings of tort.

Finally, Sugarman describes in some detail the numerous nonregulatory mechanisms he believes would help ensure that manufacturers and consumers would take precautions in a world without tort law. With respect to the deterrence goal, Sugarman argues "that it is not tort law, but mainly other existing social forces, that cause people and enterprises to act reasonably."321 He nevertheless concludes, without explanation, that "existing regulatory, economic, moral, and self-preservation pressures fail to control all dangerous conduct that society would like to deter."322 Sugarman's argument that non-tort mechanisms render tort law unnecessary may prove too much and undermine his prescription for enhanced administrative regulation.

Ultimately, it is not clear how to reconcile Sugarman's various positions. Nor is it clear — in light of his apparent belief in the efficacy of contract — how his recommendations can be meaningfully distinguished from those of contractarians Huber or Epstein (Box 1).

Table 4 adds the regulators to the Products Liability Matrix.323

318. SUGARMAN, supra note 151, at xviii.
319. Id. at 201.
320. Id. Sugarman imagines "that people who are otherwise adequately insured against accidents will transfer their preaccident rights to their employers, who would sell them to (i.e., presettle them with) liability insurers." Id. See generally Robert Cooter & Stephen D. Sugarman, A Regulated Market in Unmatured Tort Claims: Tort Reform by Contract, in New Directions in Liability Law 174 (Walter Olson ed., 1988).
321. SUGARMAN, supra note 151, at xvi.
322. Id. at 21.
323. As the Matrix is our own creation, it is possible we have misplaced one or more of the present generation in it; when confronted with our Matrix, some scholars may locate themselves differently. We have struggled not to misrepresent any scholar's views, but unfortunately scholars do not always explicitly frame their proposals in the terms that define the Matrix. Indeed,
that is part of our critique of the current debate. Scholars so far have not sufficiently recognized the importance of, or the relationship between, the two fundamental dimensions of products liability. In any event, part of our aim is to stimulate dialogue among scholars, not to pigeonhole any.
TABLE 4
THE PRODUCTS LIABILITY MATRIX
THE CURRENT PRODUCTS LIABILITY DEBATE

<table>
<thead>
<tr>
<th>DEGREE OF MUTABILITY</th>
<th>(Column 1)</th>
<th>(Column 2)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Default</td>
<td>Mandatory</td>
</tr>
<tr>
<td>(Row 1)</td>
<td>(Box 1)</td>
<td>(Box 2)</td>
</tr>
<tr>
<td>Absolute Consumer Liability</td>
<td>Huber</td>
<td>Rose-Ackerman?</td>
</tr>
<tr>
<td></td>
<td>Epstein</td>
<td>Sugarman</td>
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<tr>
<td></td>
<td>Priest?</td>
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<td></td>
<td>Schwartz?</td>
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<tr>
<td></td>
<td>Rose-Ackerman?</td>
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</tr>
<tr>
<td></td>
<td>Sugarman?</td>
<td></td>
</tr>
<tr>
<td>(Row 2)</td>
<td>(Box 3)</td>
<td>(Box 4)</td>
</tr>
<tr>
<td>Negligence</td>
<td>Landes &amp; Posner?</td>
<td>Priest</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Landes &amp; Posner Viscusi</td>
</tr>
<tr>
<td>(Row 3)</td>
<td>(Box 5)</td>
<td>(Box 6)</td>
</tr>
<tr>
<td>Strict Liability</td>
<td>Schwartz</td>
<td>Schwartz?</td>
</tr>
<tr>
<td></td>
<td>Landes &amp; Posner?</td>
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<td>Landes &amp; Posner</td>
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<tr>
<td>(Row 4)</td>
<td>(Box 7)</td>
<td>(Box 8)</td>
</tr>
<tr>
<td>Absolute Manufacturer Liability</td>
<td>Viscusi</td>
<td></td>
</tr>
</tbody>
</table>
D.  A Critique of the Debate

Probably the most obvious criticism of the current products liability debate is that neither camp has fully made its principal case—neither the contractarians for contract nor the regulators for regulation.

Confident in markets, Huber and Epstein both call for a regime of free contracting. But, in light of the contracts that existed prior to the Henningsen decision in 1960, Huber's and Epstein's proposals are tantamount to proposals for absolute consumer liability.\(^{324}\) Put differently, given that there seem to be no examples (and the contractarians offer none) of firms that expressly contracted to accept liability for damages to consumers from product-caused injuries, no reason exists to believe that any manufacturers would, given the choice, contract to anything but absolute consumer liability. Thus, from Huber's and Epstein's perspective, the important reform is not so much to revive contract as it is to change the liability standard to absolute consumer liability. Choosing any other standard would merely create needless transaction costs. Whether the standard is mutable or mandatory matters little; no one will contract around it in either case.\(^{325}\)

Priest and Schwartz have attempted to show why an idealized, rational consumer would choose the liability standard that each proposes. If either Priest or Schwartz is correct (and they cannot both be correct), then he has made a case for changing the liability standard, but not for contract. To make a case for contract, he would have to show that some idealized, rational consumer from among the large class of such consumers would prefer a liability standard other than the one he proposes. Because neither Priest nor Schwartz has explained why any consumer would want to opt out of his proposed standards, both should be agnostic regarding the mutability dimension.\(^{326}\)

Thus, while purporting to be champions of contract, the contractarians have failed to demonstrate the relevance, much less the im-

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324. Henningsen v. Bloomfield Motors, 161 A.2d 69 (N.J. 1960); see supra notes 183, 190 and accompanying text.

325. The fact that both Huber and Epstein emphasize contract instead of absolute consumer liability and that they both at times stress that a wide range of contracts would ensue if contracting were permitted might suggest that they believe procontract reform is more politically feasible than changing the liability standard, even though the former may, as a practical matter, amount to the latter.

326. Cf. Ian Ayres, The Possibility of Inefficient Corporate Contracts, 60 U. CIN. L. REV. 387, 389 (1991) (making similar point about scholarly proposals regarding corporate contracts). Indeed, in light of the evidence that free contracting leads to absolute consumer liability, Priest and Schwartz should call for a mandatory regime if they believe their proposed default standards are truly the ones that rational consumers would contract to.
portance, of contract. The regulators are no better. With the partial exception of Landes and Posner, the regulators have failed to consider, much less challenge, the contractarians' sophisticated economic arguments in defense of contract. Moreover, the regulators have yet to explicate fully the market failures they believe exist. In other words, the regulators have proposed various forms of regulation without first establishing that regulation in any form is necessary, and without describing the precise nature of the market failures that ostensibly justify regulation. Absent an understanding of the goals of regulation — that is, of the market failings that need to be overcome through regulation — it is not clear how one regulatory institution can be said to be superior to another as a means to those goals. Finally, not only have the regulators failed — both individually and collectively — to make a case for regulation, but each regulator has failed to explain how his or her proposed form of regulation would be superior to its alternatives.

Viscusi, Rose-Ackerman, and Sugarman, the regulators who call for an expanded role for administrative regulation and a diminished role for tort regulation, do not consider the full range of possible tort liability standards, yet all call for some never-before-seen method of administrative regulation. They seem to acknowledge that the current administrative regime has been no more successful than the current tort system at regulating product risks, and thus they advocate radically reforming the present administrative regime and abandoning (to greater or lesser degrees) tort. Their unstated — and unsubstantiated — premise is that tort law, unlike administrative regulation, cannot be successfully reformed. In criticizing tort law, the regulators focus on the current tort regime without considering whether tort law might be reformed; in touting the potential benefits of administrative regulation, they focus on reforming the administrative regime without confronting its significant shortcomings.

Landes and Posner's analysis contains the inverse shortcoming.

327. Cf. Clark, supra note 157, at 1708 (describing corporate law scholarship: "[S]pecifying exactly why there should be mandatory rules, and identifying theoretically justified and practically useful criteria for distinguishing between waivable and nonwaivable rules, have proven to be extraordinarily difficult.").

328. Viscusi actually states the premise but nowhere defends it. See supra note 276 and accompanying text.

329. See supra notes 273-85 and accompanying text (Viscusi), 290 and accompanying text (Rose-Ackerman), and 310-13 and accompanying text (Sugarman). See generally Clayton P. Gillette & James E. Krier, Risk, Courts, and Agencies, 138 U. PA. L. REV. 1027 (1990) (raising significant doubt about the wisdom of proposals to increase the scope of administrative agencies at the expense of courts).

330. But cf. LANDES & POSNER, supra note 7, at 53 (suggesting that one cannot assume direct regulation of the economy will be successful).
While they do describe certain market failures that might render a freedom-of-contract regime inefficient, they do not explain why tort law, rather than administrative regulation, is the appropriate response to those market failures.\textsuperscript{331} Their focus on tort no doubt tracks their primary concern with testing their hypothesis about the efficiency of the common law. However, by ignoring alternative institutions that their fellow regulators believe can be employed less expensively and to greater effect than the common law, Landes and Posner beg the question whether the tort system is efficient. Indeed, if the other members of the regulators' camp are correct, products liability law as implemented through tort regulation is grossly inefficient compared to the alternative of administrative regulation (or some hybrid of the two).

Beyond not successfully making their cases, participants in the products liability debate are vulnerable to a second, and more fundamental, criticism. This article began with the claim that the most important question in products liability is whether — or how well — markets work. Previous sections divided products liability scholars into two camps based on their explicit answers to that question: the contractarians argue that consumer product markets work; the regulators assert that markets fail. As the analysis has shown, however, fundamental tensions mark the work of all products liability scholars: each expresses a view of markets in tension with the view implied by his or her policy prescription.

Consider the contractarians. Collectively, they offer a powerful critique of the original assumptions and arguments in favor of the shift toward enterprise liability.\textsuperscript{332} The problem is that the contractarians at times seem to doubt the force of their own arguments.

Among the contractarians, Peter Huber and Richard Epstein exhibit the greatest faith in free markets. Huber insists that any liability standard will do, as long as it is mutable by contract.\textsuperscript{333} Epstein calls for contract but contends that lawmakers would save needless transaction costs by adopting a liability standard that mimics the market.\textsuperscript{334} In light of the fact that pre-1960 (that is, pre-\textit{Henningsen}) contracts between manufacturers and consumers allocated all the risks of product accidents to consumers, Huber's and Epstein's recommendations

\textsuperscript{331} Rose-Ackerman observes: "[E]ven Richard Posner recognizes that markets may fail to allocate resources efficiently. However, the chapter in his text devoted to comparing [administrative] regulation with the common law considers examples that favor the common law." Rose-Ackerman, \textit{Progressive Law}, supra note 288, at 348 n.34 (discussing \textit{Posner, supra} note 10, at 343-64).

\textsuperscript{332} See \textit{supra} section III.B.1.

\textsuperscript{333} See \textit{supra} notes 165-67 and accompanying text.

\textsuperscript{334} See \textit{supra} notes 176-79 and accompanying text.
amount to proposals for mutable, absolute consumer liability (Box 1).\textsuperscript{335} Though extreme, that proposal seems wholly appropriate if markets are without significant imperfections. Yet both Huber and Epstein at times seem to imply that consumer product markets may have significant imperfections. Huber does so by suggesting a role for mandated warnings and for administrative regulation.\textsuperscript{336} Epstein does so by suggesting that there are significant transaction costs associated with contracting around a default liability standard. If transaction costs are high, a free contract regime will not necessarily yield efficient outcomes.\textsuperscript{337}

Alan Schwartz and George Priest reveal an even greater distrust of free markets. Priest argues in favor of an immutable negligence regime (although he never explains why such a regime would be preferable to a mutable standard of any type or to absolute consumer liability).\textsuperscript{338} He seems to believe that manufacturers cannot write contracts ex ante that allocate risks as efficiently as courts would under his proposed negligence standard, though manufacturers would if they could. But this view raises difficult questions about Priest's own analysis and defense of consumer product warranties. Among other things, his claim that warranties are nonexploitative and efficient lacks foundation if contracting costs are so high.\textsuperscript{339}

Schwartz, having developed an elaborate defense of consumer product markets, calls for a mutable liability standard. Nevertheless, he too seems to harbor unexplained doubts about the efficiency of product markets. Strict liability, in Schwartz' view, would optimize insurance and deterrence. But Schwartz' preference for strict liability over absolute consumer liability stems, at bottom, from an implicit premise that a significant market failure in consumer product markets arises from the fact that consumers have imperfect information.\textsuperscript{340}

\textsuperscript{335} See supra notes 183, 190 and accompanying text.

\textsuperscript{336} See supra notes 168-73 and accompanying text. The contractarians, believing that tort law is unnecessary because contracts by themselves produce efficient results, face a difficult question: Why is any form of regulation necessary? To justify a place for administrative regulation, one has to argue first that contracts are not sufficient guarantors of safety. For the contractarians, therefore, the same logic that should (and in most cases does) lead them toward the northwest corner of the Products Liability Matrix should also lead them to reject the proposition that some form of administrative regulation is necessary to ensure that products are efficiently safe. Even if the contractarians did identify some inadequacy with contract, justifying administrative regulation while rejecting tort law would require some principled distinction between those different types of regulation.

\textsuperscript{337} See supra notes 176-79, 186 and accompanying text.

\textsuperscript{338} See supra notes 197-200 and accompanying text.

\textsuperscript{339} See supra notes 144-49 and accompanying text.

\textsuperscript{340} See supra notes 212-14 and accompanying text. Whereas Huber and Epstein base their recommendations primarily on actual contracts, Priest and Schwartz base their proposals mainly on theoretical considerations about what a utility-maximizing consumer would want. By con-
Consider the regulators. Landes and Posner, Viscusi, Rose-Ackerman, and Sugarman all seem to believe that market forces alone will not ensure the optimal allocation of product risks. But all simultaneously exhibit considerable faith in consumer product markets. And most regulators suggest that basic warning requirements would obviate the need for additional regulation. A liability standard mutable through disclaimers or other exculpatory clauses is tantamount to a standard mutable through warnings. In either case, the liability standard is a default standard. The relevant question for all products liability scholars, then, is what conditions are necessary and sufficient to contract around the default. Whether warnings or warranty disclaimers suffice makes no difference.

Once warnings are understood as implied disclaimers, the two camps of products liability scholars effectively become one. Indeed, insofar as every products liability scholar is of two minds (one explicit, the other implicit) on the question whether markets work, the biggest difference between the two camps comes down to which position is explicit and which is implicit. The contractarians explicitly deny market failures but then imply their existence by suggesting that a laissez-faire regime would not yield efficient outcomes or by calling for some form or another of regulation. The regulators explicitly recognize significant market failures but then imply their nonexistence by arguing that manufacturers should be permitted to disclaim liability through warnings, thus showing themselves to be contractarians.341 At an important level of abstraction, then, all products liability scholars — contractarians and regulators alike — would or should permit manu-

341. Readers may accuse us of contradicting ourselves. On one hand, we argue that Huber, a contractarian, is calling for regulation when he calls for a law of warnings. On the other hand, we argue that the regulators are implicitly making the case for contract when they suggest that warning requirements would overcome the market failures that might justify regulation.

Our point is that most products liability scholars are in some sense contractarians and in some sense regulators. They are contractarians in that they believe warnings should serve as contracts to shift liability to consumers. They are regulators in that they believe that those warnings should be required, and perhaps authored by administrative agencies. In taking these positions simultaneously, both the contractarians and the regulators betray their respective starting points and move part way into the others' camp. For example, Huber argues that markets will, by themselves, yield efficient levels of safety and insurance and then, without basis, advocates implementing a "law of warnings." Given Huber's premise, a law of warnings would only add to the costs of contracting around the default and would thus act as an impediment to efficiency-enhancing transactions. The regulators, unlike Huber, argue that significant market imperfections exist and, hence, they call for significant amounts and various types of regulation. But when they suggest that a warning requirement would suffice to overcome the putative, but unspecified, market failures, they are suggesting that the market failures are, after all, inconsequential. Put differently, they are suggesting that a laissez-faire regime, tempered only by sufficient risk-disclosure requirements, would be efficient.
facturers to opt out of the background liability standard. If they differ, they differ only according to what they would require for a manufacturer successfully to disclaim liability.

In a second, more subtle way, the regulators have shown themselves to be contractarians insofar as they argue that warning requirements would overcome all market failures. Presumably, warning requirements are intended to overcome imperfect consumer information — indeed, it is difficult to imagine any other market failure that warnings might remedy. Suppose, then, that the regulators are right that consumers are imperfectly informed of product risks and that the market is otherwise unhampered by market failures. If consumers believe they are fully informed, they will have no incentive to study product warnings. A warning requirement will have no effect on consumer information, because consumers will have no reason to take them into account. (You can lead a consumer to a warning, but you can't make her read.)

If, on the other hand, consumers realize that they are imperfectly informed of product risks, then they will have an incentive to study product warnings. In that case, however, consumers would demand warnings from manufacturers in the absence of any mandatory warning requirement. Given that consumer markets are, by hypothesis, unhampered by other market imperfections, consumers will get what they demand. To obtain information, consumers might purchase products only from manufacturers who provided information about product risks. To dispel any doubt about the warnings' accuracy, consumers might demand (and therefore get) an "information-inducing" contract term such as the following: "The manufacturer of this product will pay the costs of any injury that this product causes but for which there was not reasonable warning." Consumers would thereby receive credible low-cost information, and manufacturers could avoid liability simply by providing that information.

Thus, either a warning requirement will not overcome the market

342. Accordingly, all products liability scholars can be placed fairly in Column 1 (most in Box 1) of the Products Liability Matrix. See supra Table 4.

343. See supra notes 227-36 and accompanying text.

344. See Ayres & Gertner, supra note 15, at 94, 97-118 (explaining how penalty default rules can induce provision of information); cf. Mark Geistfeld, Towards a More General Theory of Products Liability Reform 63-64 (1992) (unpublished manuscript, on file with authors) (arguing that uninformed consumers would demand more than optimal levels of manufacturer-provided insurance to help encourage manufacturers to make greater investments in product safety).

345. Thus, if warnings were the solution to the problem of imperfect information, a warning requirement would be unnecessary; market forces would ensure that manufacturers provided warnings. That manufacturers have not contracted to the regime the regulators would mandate, even prior to 1960 when such contracts would have been enforced, suggests the existence of some
failure, or there is no market failure to overcome. Because imperfect consumer information is the only market failure that a warning requirement might overcome, and because a warning requirement cannot by itself overcome that market failure, the regulators, by arguing that a warning requirement would by itself overcome all market failures, logically imply that there are no market failures.

We have argued that participants in the products liability debate should, but do not, fully answer the following questions: Do consumer product markets contain significant imperfections? If so, in what specific ways do markets fail, and which liability standard will most effectively respond to those failures? This section has shown how the tensions in the work of all products liability scholars arise as a consequence of their failure to answer or to recognize the relationships between these questions. In Part IV we offer our answers to these questions by arguing in favor of Box 8 of the Products Liability Matrix.

IV. THE NEW CASE FOR ENTERPRISE LIABILITY

A. Introduction to the Affirmative Case: Reviving the First Generation's Legacy

Little remains of the first generation's legacy. Today, less than three decades after the promulgation of section 402A of the Restatement, at the peak of the first generation's influence, the present generation agrees that the first generation was misguided. As explained above, the contractarians have mounted what appears to be a successful theoretical attack on the original justifications for the movement toward enterprise liability. The regulators, though expressing a

...
lack of faith in contracts, have been unable to muster any convincing new arguments in response to the contractarians’ call for a return to contract. Indeed, far from rising to the defense of the tort system, most regulators have instead argued that the allocation of product risks should be regulated principally outside the institution of the common law.

The so-called “liability crisis” of the mid-1980s appears to have provided empirical confirmation for — and indeed may have precipitated — the views of the many commentators calling for products liability reform. While scholars disagree over how to solve the crisis, most agree on its source: the expanding tort regime of the 1970s and early 1980s. Scholars view the crisis as the unfortunate price society has had to pay because a few misguided judges and scholars originally convinced courts to move the regime in the direction of enterprise liability.

Now that lawmakers have come to their senses, however, the arguments the first generation offered on behalf of enterprise liability appear dead. As one contractarian recently remarked, “the serious and systematic reform of modern tort law is inevitable.”

But the extent to which the “liability crisis” provides empirical support for rejecting the first generation’s arguments is now a matter of some doubt. As we have argued elsewhere, the empirical phenomena attributed to the liability crisis look strikingly similar to the benefits the first generation predicted and hoped would result from the trend toward enterprise liability. Yet, while the case has been made that the liability crisis actually evidences the efficacy of tort law and the benefits of expanded manufacturer liability, a systematic theoretical response to the contractarians’ critique of expanded liability has yet to be made.

For at least the past decade, contractarian theory has plainly outgunned that of the first generation. But, as the contractarians have repeatedly remarked, if only the first generation’s premises about con-

348. See, e.g., VISCUSI, supra note 117, at 3-4 (“Without question the most compelling empirical result has been the tripling of products liability insurance premiums from 1984 to 1986. It was this mushrooming of premium levels that caught the public’s attention and led to the widespread consensus that the United States was in the midst of a ‘products liability crisis.’ “). See generally Croley & Hanson, supra note 4, at 5-10 (discussing the origins of the tort crisis and arguments for reform).

349. See, e.g., HUBER, supra note 8, at 3-4.


351. Croley & Hanson, supra note 4, at 110 (“The recent events now commonly associated with the ‘crisis’ may be better understood as the inevitable and efficient consequences of desirable changes in products liability [toward enterprise liability].”)

352. See generally id.
sumer product markets were correct, enterprise liability would indeed be the optimal regime. George Priest, for example, writes: "The unavoidable implication of the three presuppositions of manufacturer power, manufacturer insurance, and internalization is absolute liability." Thus, although the contractarians have successfully discredited the original arguments in favor of expanded manufacturer liability, the question remains whether new arguments can rehabilitate the first generation's premises.

This Part intends to provide such arguments. It brings the tools of law and economics to the defense of the premises of the first generation of products scholars and judges. In so doing, this Part provides new theoretical support for the first generation's expansion of manufacturer liability. In fact, by arguing for a full-fledged enterprise liability regime, it goes even further than the first generation was willing to go.

The sections that follow identify several important market failures that justify enterprise liability. Each market failure presented can be understood as a resurrection of one of the first generation's three principal justifications for expanded manufacturer liability — imperfect consumer information (section IV.B.1), exploitative manufacturer market power (section IV.B.2), and risk distribution (section IV.B.3) — though often in drastically modified form.

As noted above, many of those most critical of the expansion of manufacturer liability toward enterprise liability have acknowledged that, if the first generation's premises were true, then the revolution that generation began would not have been misguided. Significantly, the contractarians have conceded that not all of the first generation's premises must be true for the expansion of manufacturer liability to be justified; one or more of them may make the case. In light of such acknowledgments the following arguments, which may well have individual weaknesses, make a new and compelling case in favor of enterprise liability when taken together.

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353. Priest, supra note 37, at 527. Similarly, Schwartz implies that the assumptions underlying the modern regime imply greater manufacturer liability. Schwartz, supra note 87, at 834. For additional suggestions that the first generation's premises, if correct, dictate manufacturer liability, see Epstein, supra note 101, at 2205 (prohibitive disclaimers make sense if there is "the skewed distribution of loss prevention skills posited by the modern cases"); Priest, supra note 12, at 1311 & n.87, 1350; Schwartz, supra note 7, at 371 ("Strict liability is justifiable if firms routinely use suboptimal contracts.") (emphasis added).

354. Alan Schwartz, for example, has recently shown that certain pairs among the "foundational assumptions" underlying the modern products regime justify strict liability. See Schwartz, supra note 87, at 821-23; see also Priest, supra note 37, at 520-27.
B. Reviving the Premises: Three Market Failures

1. Imperfect Consumer Information: The Costs of Information

a. The prohibitive costs of perfect consumer information. One source of imperfect consumer information follows from the simple proposition that information is costly. Yet the efficiency of a freedom-of-contract products liability regime depends upon consumers' knowledge of the full costs — that is, both the nominal price and the risk — of the products and services they purchase. In other words, the efficiency of consumer product markets depends upon consumers' ability to overcome information costs, for without full information consumers are unable to make consumption and warranty decisions that reflect their true preferences. For example, where consumers underestimate product risks, they will tend to buy more products, and more dangerous products, than they would otherwise prefer.

Because consumers are not endowed with information about product risks, they must acquire it, and any means of obtaining such information requires investment. All else equal, the more information consumers seek, the more costs they must incur. Consumers' willingness to incur such costs will, of course, depend on the benefits of the

355. Although legal economists do not dispute this simple proposition, products liability scholars have so far failed to appreciate fully its profound implications. See infra section IV.B.2.

356. Products liability scholars have taken, roughly speaking, one or both of two approaches to the question of whether consumers are sufficiently well informed of product risks. The first approach, the information-cost approach, assumes that consumers are rational and informed of those risks for which the marginal benefits exceed the marginal costs of becoming informed. The second approach, the information-bias approach, recognizes that cognitive biases may cause consumers systematically to misperceive certain types of risks. In this article we take an information-cost approach and respond to those who have done the same. Thus, we do not respond to scholars who have criticized the trend toward enterprise liability on the ground that consumers, because of risk-perception biases, generally overestimate rather than underestimate product risks. See, e.g., VISCUSI, supra note 117, at 64-65; Schwartz, supra note 87, at 829-30. According to that view, the problem of imperfect information will, if anything, lead to overdeterrence and overinsurance under a free-contract regime. Tort law, according to that view, cannot reduce the inefficiencies that result from overestimation of product risks. In subsequent work, we intend to respond to this information-bias critique of enterprise liability by providing support for the following three conclusions. First, cognitive biases, by themselves, may cause consumers to underestimate, not overestimate, the risks of most products. Second, manufacturers can and will employ consumers' cognitive biases in order to induce consumers to underestimate product risks further. Finally, even if the only inefficiencies that do exist in consumer product markets result from consumer overestimation, enterprise liability can be justified as a means of mitigating those inefficiencies.

357. Identifying all of the different types of information consumers must have to make fully informed consumption decisions — information about the types of possible product injuries, the probability of each, the severity of each, the way those risks are allocated contractually and legally, and so on — is a complicated project beyond the scope of this article. For present purposes, we simply recognize that a freedom-of-contract regime will be efficient only if consumers know (1) what risks products pose and (2) how warranty (or disclaimer) terms (including the legal rules governing those, see infra notes 359-60 and accompanying text; text accompanying note 371) allocate those risks — that is, which among all product risks consumers will bear.
information they obtain. Rational consumers will invest only up to the point at which the marginal costs of additional information equal the marginal benefits. Because information is costly, and becomes more costly as more is obtained — assuming diminishing marginal returns to investments in information — it seems very unlikely (and, indeed, may often be impossible) for consumers to be perfectly informed about product risks and how those risks are allocated. Where the benefits of information about risk are small, as they may well be for a large majority of product-caused accidents, which are very improbable, consumers will invest little to obtain that information.358

Reading product warranties or product warnings, where available, is one strategy consumers might adopt to obtain risk and insurance information. But even that relatively inexpensive strategy may not be worth its costs, especially where the probability of a product accident is small.359 Even where the benefits of reading a warranty or warning do exceed the costs, consumers may often still lack the information they need to make informed consumption choices. Consumers must do more than read the words in a warranty; they must know what the words mean and whether the words are credible. Among other things, consumers must know which liability standard applies in the relevant jurisdiction and whether, how, and to what extent manufacturers can contract around that standard through warnings or warranties. Additionally, if the manufacturer may be held liable for some or all of the costs of product-caused accidents through tort or contract, the consumer must have some information about the manufacturer's solvency or liability insurance coverage. In short, the fact that the costs of reading a warranty or warning are low does not necessarily mean that the costs of becoming well informed also will be low.360

Notwithstanding that information is costly and that the benefits of product- and warranty-related information are likely often small, the

358. Cf. generally Ronald J. Gilson & Reinier H. Kraakman, The Mechanisms of Market Efficiency, 70 VA. L. REV. 549 (1984) (arguing that the cost of information is critical to the question of whether and when capital markets will be efficient).

359. Landes and Posner make, but then effectively abandon, this point. See supra notes 220-24 and accompanying text.

360. We belabor the point only because some products scholars seem to overlook it. See, e.g., Landes & Posner, supra note 124, at 419; Schwartz & Wilde, supra note 137, at 1402 (arguing that warranties are an element of the "search equilibrium model," where "search" refers to the process by which consumers become informed about the products, prices, and terms of sale); Priest, supra note 12, at 1347 (stating that manufacturers will respond to the preferences of those consumers who read warranties). Professor Howard Latin, in an article largely overlooked in the products liability literature, provides a fine summary of the factors that might lead consumers to be ineffective, and manufacturers to be effective, at "problem-solving behavior," which includes being well informed. See Howard A. Latin, Problem-Solving Behavior and Theories of Tort Liability, 73 CAI. L. REV. 677, 682-96 (1985). Based on his analysis, Latin offered a preliminary argument in favor of an enterprise liability regime. See id. at 730-32.
contractarians appear to have shifted the burden of proof to those who would argue that consumer product markets should be regulated because of imperfect consumer information. They have done so by offering a range of theoretical arguments, which the contractarians believe are supported by empirical evidence, on behalf of the claim that the first generation was wrong to assume that consumers systematically underestimate product risks. Based on those arguments, the contractarians have concluded that consumers are sufficiently well informed to ensure that consumer products and product warranties reflect the preferences of fully informed consumers. As the following section argues, however, the contractarians (and for that matter the regulators) have not fully appreciated the implications of the fact that information is costly.

b. The contractarians' response to the problem of information costs. The contractarians understand fully that information costs may prevent otherwise efficient contracting. They have responded to this possibility, first, by denying its empirical importance and, second, by explaining how the costs of information may be overcome.

Some contractarians argue, for instance, that consumers are likely to read most product warranties because the risks of product-caused injuries are large enough to motivate consumers to acquire information. As Alan Schwartz puts it, because "[p]roduct-defect risks are among the most important risks that consumers face[,] consumers probably are familiar with the aspects of contracts that relate to product failure." Schwartz, however, provides no empirical support for his assertion regarding the benefits of acquiring that information. Even if consumer product accidents are, in the aggregate, among the most important risks that consumers face, those risks probably relate disproportionately to a small number of consumer products, such as automobiles and firearms; the risks posed by the vast majority of remaining products are probably relatively small. Thus, the benefits of reading warranties that govern the risks of that majority of products

361. See supra notes 132-38 and accompanying text.
362. See supra section III.B.1.
363. Indeed, scholars have basically ignored Landes and Posner's argument that information costs may be high enough to prevent consumers from reading warranties. The assumption seems to be that, because Landes and Posner's information cost argument is part of a suspect, positivist project, their argument itself must be suspect. See supra note 225. Those scholars who have considered the costs of information implicitly or explicitly concede that information costs could as a matter of theory lead to market failures, see, e.g., Danzon, supra note 226, at 571-72; Epstein, supra note 101, at 2203; Schwartz, supra note 87, at 828-29; see also infra notes 364-82 and accompanying text, but claim that possibility has little empirical significance.
364. Schwartz, supra note 87, at 826.
seem unlikely to be worth the costs.365

Still other scholars have argued that the costs of information could be lowered for consumers if manufacturers or third parties bore them. For example, Patricia Danzon, another well-known torts scholar,366 claims that "the manufacturer or some consumer surrogate such as Consumer Reports" could reduce the costs of information to consumers "simply by publishing warnings."367 That a manufacturer or consumer surrogate could provide the information through product warnings, however, does not mean that it would. Obviously, the manufacturer has no incentive to warn its consumers of risks that the consumer underestimates. Indeed, the very fact that a market exists for consumer surrogates such as Consumer Reports provides some evidence that manufacturers have not volunteered enough credible information about their own products. Moreover, even Consumer Reports will provide less than the efficient amount of information to consumers regarding product risks given, first, the higher costs to Consumer Reports (as compared to the manufacturers themselves) of gathering the relevant information and, second, the public-good nature of such information.

Many products liability scholars have proposed that manufacturers be required to provide warnings.368 But this solution, like all warning proposals, merely denies the problem. As explained above,369 if the costs of reading a warranty disclaimer exceed the benefits, it is not clear why the same would not be true of reading a warning. Information costs might be reduced if, as Schwartz and Viscusi propose, warnings were simplified.370 Simple warnings, however, will not contain as

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365. Schwartz' argument assumes, of course, that products have written warranties. For products that are sold without written warranties, one possible source of information is eliminated.

366. Danzon is another influential torts scholar who advocates increased reliance on administrative regulation as opposed to tort regulation. But because Danzon's views are substantially similar to (and somewhat less developed than) Viscusi's, we have not given them independent treatment. See generally Patricia Danzon, A Second Look at Tort Reform (1990) (paper prepared for the Round Table on Tort Reform, sponsored by the Institute for Law and Economics, University of Pennsylvania) (on file with authors).

367. Danzon, supra note 226, at 572.

368. Among the contractarians, Peter Huber and Alan Schwartz have called for warning requirements. See supra notes 168-71 and accompanying text (Huber); Schwartz, supra note 87, at 840-43. Among the regulators, all but Stephen Sugarman have. See supra notes 222-25 and accompanying text (Landes and Posner); supra note 245-52 and accompanying text (Viscusi); supra note 301 and accompanying text (Rose-Ackerman).

369. See supra notes 226-39 and accompanying text (criticizing Landes and Posner's argument that disclaimers should not be enforced while warnings should).

370. See Schwartz, supra note 87, at 840-42 (proposing a national warnings system); Viscusi, supra note 117, at 155-56 (same); see also Geistfeld, supra note 344, at 48 (arguing that some types of imperfect information may be overcome through a regulatory requirement that warranties be made more readily understandable to consumers).
much information as complex warnings. By trying to lower the costs of obtaining information, such a proposal would simultaneously lower the quantity and, hence, the benefits of the information obtained. While Schwartz seems to recognize this tradeoff, he does not explain how it might be settled.

Other contractarians emphasize that consumers’ repeated purchases of certain products might mitigate the costs of reading warranties. Although the benefits of reading a warranty may be small when the consumer intends to buy a particular product only once, the consumer must multiply the benefits of reading the product warning by the number of repeated purchases. That argument too is flawed, however, inasmuch as it implicitly and implausibly assumes that manufacturers cannot alter their warranties. Because manufacturers can change the terms of their warranties, a consumer will have to read a product’s warranty with each purchase, no matter the number of repeated purchases. Moreover, in our many-product world, it seems unlikely that consumers can remember the warranty terms provided with each product.

Some contractarians make the related argument that, where consumers make repeated purchases of the same product, their experience with that product will teach them about the risks of the product. That is, consumers will learn — even if they do not read the product warnings — whether and how a product is risky if they buy the product repeatedly. Regarding consumer estimates of product risks, Alan Schwartz thus claims that “[e]xperience probably is a good teacher.” But that assertion is belied by the fact, which Schwartz recognizes, that “a product accident is a low probability event.” The chances of being injured are so low that consumers will either not be injured, in which case they will learn nothing about the product’s

371. See supra notes 234-35 and accompanying text.
372. See Schwartz, supra note 87, at 840-42. For further discussion of the possible merits of proposed warning requirements, see infra section IV.C.1.
373. See Danzon, supra note 226, at 572 (“Thus for many common consumer products, repeat purchase undermines the argument that it is not rational for consumers to process information about low-probability events.”); Epstein, supra note 101, at 2204 (“The de minimis argument is flawed, for while the frequency of accidents may be low, the number of repeat purchases is very large, so that contracting with the consumer would be worthwhile if the manufacturers wanted to disclaim the risk.”).
374. Schwartz, supra note 87, at 828; see also Priest, supra note 12: [W]arranty content may affect the repeat purchase rather than the initial purchase decision. A consumer may select among competing brands according to his experience with a specific product and with its warranty. If so, manufacturers may be forced to draft warranties responsive to consumer preferences in order to assure a continued custom.
Id. at 1347 (footnote omitted).
375. Schwartz, supra note 87, at 829.
riskiness, or they will be injured, in which case the information came too late and will probably be of little benefit in the future. In light of the fact that experience conveys little or no timely information about product risks, experience is, if anything, probably a cruel teacher. 376

Richard Epstein also challenges the empirical importance of the fact that information is costly by arguing that ordinary use reveals the defects of many or even most products; those defects are therefore already on consumers’ minds. 377 As empirical support in defense of this claim, however, Epstein offers only a few examples of products, including MER/29, which he believes is patently risky. 378 But this example does not support the argument. Although the risks of MER/29 may now be well known, they were not well known at the time that the product came onto the market. 379 The risks became better known only after and because the product caused a large number of consumer injuries. But that information was of no help to those consumers who needed it — that is, the consumers who were injured. 380 By the time

376. Mark Geistfeld has recently argued that “prior consumer experience” may not increase a consumer’s knowledge of a product’s safety and concluded that the “inefficiency generated by consumers’ imperfect information about product risks . . . is much more intractable than the inefficiencies created by other types of consumer imperfect information.” Geistfeld, supra note 344, at 65-66. In essence, his point is that product safety quality is a credence feature — that is, a feature about which consumers typically gain little information either before or after they purchase the product — not a search or experience feature. See generally Phillip Nelson, Information and Consumer Behavior, 78 J. POL. ECON. 311 (1970) (defining search and experience goods); Michael R. Darby & Edi Kami, Free Competition and the Optimal Amount of Fraud, 16 J.L. & ECON. 67 (1973) (defining credence goods).

377. See Epstein, supra note 101, at 2204-05. With respect to latent defects, those not revealed by ordinary use, Epstein actually agrees with Landes and Posner that rational consumer ignorance justifies a strict liability rule. See id. at 2202. Epstein thus suggests that the appropriate inquiry for products liability reform concerns which product defects are patent and which are latent. See id. at 2206.

378. Id. at 2204. Epstein offers general aviation aircraft as another example of a product the risks of which consumers are already aware. Id. Clearly, however, aircraft are not run-of-the-mill consumer products. Cf. Hanson & Logue, supra note 11, at 191-93 (describing the spurious auto insurance paradigm). Epstein offers Bendectin as further support for his claim that consumers are aware of a product’s risks. But that example seems not to support his claim in light of the significant scientific dispute over Bendectin’s risks. For background and case summaries on the continuing Bendectin controversy, see Turpin v. Merrell Dow Pharmaceuticals, Inc., 959 F.2d 1349, 1350-52 (6th Cir. 1992), cert. denied, 61 U.S.L.W. 3257 (U.S. Oct. 6, 1992); see also Daubert v. Merrell Dow Pharmaceuticals, Inc., 951 F.2d 1128 (9th Cir. 1991), cert. granted, 113 S. Ct. 320 (1992) (The Supreme Court is expected to rule on the use and admissibility of various scientific studies offered to support claims of Bendectin’s harmfulness).


380. Moreover, consumers tend to rely on and defer to the judgment of their doctors in deciding whether and how much of any drug to consume. In such cases, whether a consumer ignores or considers a product’s risks and warranty terms will depend in considerable part on her physician’s recommendations. Thus, Epstein’s example is, if anything, exceptional.
the risks were well known, the product was off the market.\textsuperscript{381} Moreover, Epstein does not consider the possibility that tort law may have played some role in publicizing such risks.\textsuperscript{382} There is considerable irony in the argument that, because consumers are informed of product risks, tort should be supplanted by contract.

Finally, the contractarians have argued that, if even only a fraction (as few as one third) of a product's consumers inform themselves by shopping around, manufacturers will act as if \textit{all} consumers are well informed.\textsuperscript{383} As manufacturers compete over the small number of informed marginal consumers, uninformed inframarginal consumers will be protected from their own ignorance. This argument, too, depends on dubious assumptions. First, it is questionable whether, for most products, even one third of all consumers are informed of warranty terms given the high costs and low benefits of information in this context. Second, even assuming a substantial percentage of consumers are well informed of warranty terms and product risks, uninformed consumers cannot free ride on the information investments of well-informed consumers if, as seems likely, manufacturers can segregate between the two groups.\textsuperscript{384} Lastly, to the extent that manufacturers cannot segregate between informed and uninformed consumers, a benefit will not necessarily accrue to uninformed consumers when the preferences of informed consumers dictate a product's safety level and warranty terms if the preferences of informed (or marginal) consumers do not match the preferences of uninformed (or inframarginal) consumers.\textsuperscript{385}

In light of the above, the contractarians' faith that the costs of information do not undermine the efficiency of consumer product markets seems unfounded.

c. \textit{Why imperfect consumer information that is correct on average is inadequate.} As described in section III.B.1.a, the contractarians sometimes argue that even if information costs prevent consumers


\textsuperscript{383} See supra notes 137-38 and accompanying text.

\textsuperscript{384} See Hanson & Logue, supra note 11, at 154-58 (arguing that manufacturers are able to differentiate their products and target sales to narrow consumer groups effectively).

\textsuperscript{385} We argue below that, where the preferences of marginal consumers diverge from those of inframarginal consumers, there may be a welfare loss to inframarginal consumers. See infra section IV.C.
from estimating product risks with complete accuracy, there is no reason to believe that consumer estimates will be biased on average. And, so long as consumer estimates are correct on average, contracting between manufacturers and consumers should yield efficient levels of deterrence and insurance.\textsuperscript{386} For at least two reasons, however, that conclusion does not follow from the premise. First, even if consumers can estimate the average risks posed by, and average warranty provisions of, a given product across competing brands, product markets will still be inefficient insofar as information costs prohibit consumers from distinguishing among specific brands of that product. In other words, consumer ignorance concerning the risk and warranty variation among particular brands of products will undermine market efficiency to the extent that consumers will be well informed only about a generic product's risks and warranty terms.

To see why,\textsuperscript{387} consider the incentives a particular manufacturer would have in a market where some sufficient number of consumers read warranty terms and estimated product risks so that they were well informed about the generic version of the manufacturer's product but could not distinguish, according to risk level, the manufacturer's particular brand from competing brands of that product. Such a manufacturer, considering whether to make its product more safe or less safe than the average brand, would reason as follows. To provide more safety than the average would require the manufacturer to raise its price by the cost of the improvement. That price increase would not be recoverable, however, since by hypothesis consumers could not appreciate it — that is, they could not distinguish the manufacturer's brand from other brands of the same product. The manufacturer would therefore not make the change. To make its brand less safe than the average, on the other hand, would lead to increased profits. Below-average safety would mean below-average costs of production. Yet consumers, unable to recognize that the manufacturer's product was less safe, would still be willing to pay the average price for the product. The manufacturer could thereby capitalize on consumers' inability to make distinctions among specific brands. In short, the man-

\textsuperscript{386} See \textit{supra} note 136 and accompanying text. Priest makes essentially the same argument about consumer product warranties. See Priest, \textit{supra} note 12, at 1303 n.42 ("[T]he problem of product warranties is more interesting where consumers systematically misperceive product risks — because the market mechanism [therefore] requires correction — than where consumers make estimates that are highly variant, but on average accurate.").

\textsuperscript{387} The story that follows is another iteration of the "lemons problem." See George A. Akerlof, \textit{The Market for "Lemons": Quality Uncertainty and the Market Mechanism}, 84 Q.J. ECON. 488 (1970); see also Geistfeld, \textit{supra} note 344, at 63-67; Hanson & Logue, \textit{supra} note 11, at 176-77; Latin, \textit{supra} note 360, at 695; Steven Shavell, \textit{Strict Liability Versus Negligence}, 9 J. LEGAL STUD. 1 (1980) (all applying lemons problem to consumer product markets).
manufacturer would have an incentive to "free ride" on the safety provided by its competitors. Of course, all manufacturers would reason in this way; the result would be an "unraveling" of product safety.

Unraveling of this sort would not be limited to product safety. In a market where consumers who read warranties possess only generic information about the terms of those warranties, individual manufacturers would, for exactly the same reasons, have incentives to free ride on the insurance coverage provided by their competitors. Unraveling will occur, then, either in the safety of a product or in the terms of the product's warranty (or both), so long as consumers' information about product risks and warranty terms is, albeit correct on average, generic. To avoid unraveling, consumers must have information about specific product brands.

Second, even assuming that consumers' estimations of risk and knowledge of warranty terms are, on average, correct not merely about generic products but about particular brands of products, product markets will still be inefficient to the extent that individual consumers err. Although under such assumptions manufacturers will respond to average consumer preferences, and will thus provide both optimal safety investments and optimal warranty terms, the consumption decisions of individual consumers, whose estimations would be distributed around that average, will still produce welfare losses. Some consumers will continue to underestimate product risks, only to be "offset," from the viewpoint of the manufacturer, by consumers who overestimate product risk by the same amount. The first consumer will buy too much — an "error of commission" — while her counterpart will buy too little — an "error of omission."\[390\]

The same will be true for warranty terms. Although consumers as a whole may understand warranty terms correctly on average, some individual consumers will mistakenly believe that a given warranty provides greater coverage than it really does and thus buy too much. Other individual consumers will simultaneously believe that the warranty provides less coverage than it in fact does and thus buy too little. On the warranty dimension, too, these individual mistakes mean welfare losses for individual consumers, no matter how perfectly offsetting.

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388. See Hanson & Logue, supra note 11, at 176-77; Priest, supra note 12, at 1303-05, 1352; Shavell, supra note 387, at 5.

389. For a fuller treatment of this argument, see Hanson & Logue, supra note 11, at 177-79;\[see also Geistfeld, supra note 344, at 60-63.\]

390. See Hanson & Logue, supra note 11, at 177-79. For the same reason, the first consumer will take too little care while her counterpart will take too much care.
In a number of ways, then, the consequences of the costs of information are more complicated than contractarian theory suggests. In addition to the inefficiencies that arise when the costs of estimating product risks and of reading and understanding warranties exceed the benefits for all consumers, the problems of product safety and product warranty unraveling, as well as the welfare losses associated with individual errors of commission and omission, remain. These problems undermine the contractarians' arguments that lack of consumer information is less problematic than the first generation thought.

2. Exploitative Manufacturer Market Power: The New Exploitation Theory

The first generation argued that manufacturer market power led to exploitative product warranties.391 The contractarians respond first that as a theoretical matter manufacturers with market power will satisfy consumers' warranty preferences and will exercise their power only in setting prices, and moreover that the first generation's "exploitation theory" is not confirmed by actual product warranties, which confirm instead the predictions of Professor Priest's influential "investment theory" of warranties.392 In making their case, the contractarians have assumed that manufacturers are well informed of consumers' warranty preferences. However, if manufacturers are not well informed of consumers' warranty preferences, products and warranties may not efficiently conform to those preferences. An undetected divergence of preferences between marginal and inframarginal consumers is one way that imperfect manufacturer information may undermine the efficiency of consumer product markets.

Imagine that Acme Incorporated, a firm with market power, is trying to decide whether to add provisions to its warranty (or safety features to its product) that would, if free, make all consumers better off. Assume for simplicity that each consumer buys just one widget. A warranty provision will increase Acme's costs by \( c \). The marginal consumer, to whose preferences Acme is most sensitive and from whom Acme gathers most of its information about consumer preferences generally, will value that warranty provision by \( p \). Thus, if there are \( x \) consumers, Acme would expect its revenues to increase by \( xp \). Acme

391. See supra section II.B.2.
392. See supra section III.B.1.b. The contractarians generally agree that the investment (or comparative advantage) theory of product warranties best explains the actual terms of product warranties and provides the best evidence that contracting between manufacturers and consumers is efficient, not exploitative. See Epstein, supra note 43, at 656-58; Priest, supra note 12, at 1347; Schwartz, supra note 87, at 828; see also Danzon, supra note 226, at 572; supra note 149 and sources cited therein.
will add the provision only if it predicts that doing so will increase its profits. Because, however, \( p \) measures the marginal consumer's and not the typical consumer's willingness to pay (which Acme does not know), \( xp \) does not necessarily measure the social gains of adding the warranty provision.\(^{393}\) The provision will be socially efficient if the average benefit exceeds the average cost (or, put differently, if the total benefits exceed the total costs).

As Michael Spence has explained:

The social benefits correspond to the increase in the revenues of the firm only if the marginal consumer is average or representative . . . . but there is nothing at all intrinsic to the market that guarantees that the marginal purchaser is representative. On the contrary, in many cases, the marginal consumer is quite unlikely to be representative in his marginal valuation of quality.\(^{394}\)

It is, of course, possible that the marginal consumers of many consumer products are unrepresentative in their valuations of warranty terms and safety investments. In particular, marginal consumers may demand warranty provisions (and safety investments) less extensive than those demanded by the average consumer. To the extent that this is the case, manufacturers, responding to those consumers' preferences, would stop adding warranty coverage too soon. Warranties would be inefficiently restrictive.\(^{395}\)

To understand the significance of this potential problem, it may now be useful to return to the example from section III.B.1 illustrating Schwartz and Wilde's argument that manufacturers will not exercise market power by reducing the quality of their products.\(^{396}\) In that example, it was assumed that Acme Incorporated was deciding whether to add a safety device (or warranty provision) to its widgets that would cost Acme only $20 but would save the average consumer $50 in expected accident costs. Schwartz and Wilde conclude that Acme will add the device but charge consumers more than the $20 it costs. But they effectively assume there is no relevant difference between marginal and inframarginal consumers,\(^{397}\) and their conclusion does not follow if that assumption is relaxed. Suppose for example

\(^{393}\) This argument does not assume that manufacturers are completely unable to segregate consumers, but rather that they cannot do so perfectly.

\(^{394}\) A. Michael Spence, Monopoly, Quality, and Regulation, 6 Bell J. Econ. 417, 418 (1975).

\(^{395}\) The conclusion that providing a warranty suited to Acme's average consumer rather than its marginal consumer would improve social welfare may depend upon the shape of the distribution of consumers' preferences along the demand schedule.

\(^{396}\) See supra notes 139-43 and accompanying text.

\(^{397}\) Cf. Schwartz & Wilde, supra note 122, at 639 n.19 ("[I]t seems safe to assume that the degree of risk aversion does not correlate strongly with the extent of search.").
that, although consumers of widgets are willing to pay, on average, $50 for Acme's new safety device, the marginal consumer is willing to pay only $10 for it. In that case, even though the safety device is socially efficient, Acme will not provide it, insofar as marginal consumers' response will not "convey information about the value attached to [the safety feature] by inframarginal consumers." In effect, therefore, just as the first generation had believed, the average consumer of widgets experiences "exploitation" at the hands of manufacturers as a result of their efforts to maximize profits by providing both products that are less than optimally safe and warranties that are less than optimally generous. That is the result predicted by the "new exploitation theory."

To determine whether the new exploitation theory might have relevance to our understanding of consumer product markets, we will offer preliminary answers to two general questions. First, is the new exploitation theory plausible — that is, is there any theoretical reason to believe that marginal consumers are the relatively low-risk consumers of a given product? And, second, if plausible, does the new exploitation theory predict actual warranty terms as effectively as (or more effectively than) the now-dominant investment theory does? Providing conclusive answers to those questions is well beyond the scope of this article. However, a brief examination of the arguments and evidence on which the investment theory is based suggests an affirmative answer to both questions.

In setting forth the investment theory, Professor Priest unwittingly all but sets forth the new exploitation theory. As he emphasizes, "[t]he task of defining optimal warranty provisions resembles the task of defining optimal rate classes in insurance contracts:"

For most types of insurance, of course, it is prohibitively costly either to predict exactly the risk that an individual brings to a pool or to charge individual premiums. As a consequence, an insurer is forced to lump individuals into separate classes or, sometimes, into a single class. . . . Thus, the premium undercharges relatively high-risk individuals and overcharges relatively low-risk individuals.

As a consequence of this lumping, according to Priest, low-risk consumers subsidize high-risk consumers and thus will be less willing to

398. Spence, supra note 394, at 417.
400. Priest, supra note 12, at 1316.
401. Id. at 1314-15.
pay either to insure against or to prevent the loss.\textsuperscript{402} For that theoretical reason, Priest, in his analysis of insurance generally and of consumer product warranties more specifically, concludes that low-risk insureds will be marginal consumers.\textsuperscript{403} To the extent that Priest is correct,\textsuperscript{404} the new exploitation theory gains plausibility.

Assuming the new exploitation theory is theoretically plausible, there remains the important question as to how well the theory predicts the actual terms of warranties. Fortunately, Priest has, again unwittingly, already tested the new exploitation theory. That is true because the general prediction that Priest's investment theory yields is virtually identical to that of the new exploitation theory:\textsuperscript{405}

\textsuperscript{402} To some extent, price discrimination might provide a solution to this problem. Ideally, consumers would be charged variable premiums according to the amount of warranty coverage they demanded. But there may be real-world limits to how specifically warranties can be written. \textit{See supra} text accompanying note 401; \textit{see also} Schwartz, \textit{supra} note 7:

Since the costs to a firm of creating a special contract for one person will almost always exceed the gain to that person, and therefore the price he is willing to pay, this relatively unique consumer probably will be unable to purchase the insurance he wants. Firms commonly are responsive to the preferences of consumer groups, rather than the preferences of every consumer.

The consumer in the illustration actually is the victim of unequal bargaining power, but his plight seems not to call for a legal response. \textit{Id.} at 371-72; \textit{see also} Spence, \textit{supra} note 394:

One might ask why a whole spectrum of products, differentiated in terms of both price and quality, is not produced. The assumption is that fixed costs or increasing returns and demand prevent the profitable production of more than one product of the type under consideration. More generally, fixed costs \textit{limit} the number of products without reducing the feasible set to just one.

\textit{Id.} at 418 n.2. \textit{But cf.} Hanson \& Logue, \textit{supra} note 11, at 154-58 (arguing that manufacturers may be capable of segregating consumers into fairly narrow classes). Because there are limits to the extent contracts can be narrowly tailored, some consumers will have to put up with what is for them nonoptimal coverage.

\textsuperscript{403} \textit{See} George L. Priest, \textit{The Antitrust Suits and the Public Understanding of Insurance}, 63 Tul. L. Rev. 999, 1027 (1989) ("Within any insurance pool, low-risk insureds will always be the marginal insurance purchasers."); Priest, \textit{supra} note 9, at 1545 ("In essence, the insurers are competing over the relatively low-risk insureds of any risk pool, who are likely to select that insurer most precisely able to price the risk the insured brings to the pool."); Priest, \textit{supra} note 12, at 1315 ("At the margin, some low-risk individuals are likely to find that the cost of market insurance exceeds the benefit, and will shift to allocative investments that reduce the likelihood of the loss or to self-insurance."); id. at 1316 ("Smaller families at the margin [that is, families with a lower probability of experiencing a loss] may find warranty protection to be worth less than its cost."); id. at 1317 ("The warranty provides a term of basic coverage demanded by the lowest risk members of the pool."); Priest, \textit{supra} note 130, at 1395 n.49 ("Warranty coverage expires when differences among consumers in their investments to prolong product life become significant. Thus, low-risk consumers find longer coverage worth less than its average cost and are sufficient in number to dominate the warranty market.").

\textsuperscript{404} We are somewhat skeptical of Priest's theoretical claim. It is not completely clear to us, for instance, why high-risk consumers would not be marginal consumers where insurance coverage was limited to some amount less than a high-risk consumer would lose were an insured loss to occur. Our goal in this section, however, is not to challenge that assumption, but to argue that even if the assumptions underlying the investment theory were correct, product warranties may still be inefficiently restrictive (i.e., "exploitative").

\textsuperscript{405} Priest purportedly bases his investment theory on the following empirical assumptions: (1) "consumers are perfectly informed about the likelihood of a product defect and about the losses that will be suffered should a product become defective"; (2) "consumers somehow make
The terms of the standard warranty... establish the minimum level of coverage that is demanded uniformly by each member of the large class of purchasers.... The standard level of coverage comprises the minimum performance bond necessary to encourage appropriate investments by manufacturers in the design or mechanical qualities of the product and the minimum insurance coverage demanded by the lowest risk members of the consumer pool.406

Reviewing the warranty provisions of sixty-two consumer products, Priest concluded that "the investment theory explains warranty practices more comprehensively" than its competitors do.407 But, because the new exploitation theory yields the same prediction as does the investment theory, Priest confirmed the former when intending to confirm only the latter.

As a means of choosing between the two theories, both of which seem equally consistent with the evidence, it should be noted that the investment theory provides only a very tentative explanation of the means by which consumers convey their preferences to consumers:

Manufacturers compete, not over the entire set of consumers, but over the set of marginal consumers. If a small group of consumers reads warranties and selects among products according to warranty content, manufacturers may be forced to draft warranties responsive to the group's preferences, even though the large majority of consumers generally neglect warranty terms."408

Implicit in that explanation is the assumption that marginal consum-

406. Id. at 1319 (emphasis added). Priest argues, when developing his theory of product warranties, that high-risk consumers will be satisfied with the minimal coverage provided in standard warranties because they can obtain supplemental coverage from other sources. See id. at 1316-18. However, that argument is not part of the general prediction that Priest is testing in his empirical analysis. Moreover, as Priest recognizes, these alternative sources cannot perfectly segregate consumers according to each consumer's demand for insurance. See id. at 1314-15. In any case, the segregation that does occur will not necessarily lead to the welfare-optimizing result that Priest imagines. See generally Michael Rothschild & Joseph Stiglitz, Equilibrium in Competitive Insurance Markets: An Essay on the Economics of Imperfect Information, 90 Q.J. Econ. 629 (1976) (the seminal work exploring how low-risk insureds are made worse off by the existence of high-risk insureds where insurers are asymmetrically uninformed in a competitive insurance market); Joseph E. Stiglitz, Monopoly, Non-linear Pricing and Imperfect Information: The Insurance Market, 44 REV. ECON. STUD. 407 (1977) (same in monopolistic market); Phillipe Aghion & Benjamin Hermlin, Legal Restrictions on Private Contracts Can Enhance Efficiency, 6 J.L. ECON. & ORG. 381 (1990); Ayres & Gertner, supra note 177, at 737-42 (employing Rothschild & Stiglitz' insight to explain how contractual inefficiencies may exist even when contracting is costless). For an excellent and accessible rendition of the Rothschild-Stiglitz insight, see Ayres, supra note 326, at 392-402.

407. Priest, supra note 12, at 1347.

408. Id.
ers represent a random sample of the entire pool of a product's consumers. Otherwise, by satisfying the preference of marginal consumers, manufacturers would — as Spence has shown and the new exploitation theory predicts — fail to satisfy the preference of average consumers. Also implicit, however, is the assumption that most marginal consumers, unlike most inframarginal consumers, base their consumption choices on the content of warranties. Unfortunately, the investment theory fails to reconcile the positions that marginal consumers are similar to inframarginal consumers in their demand for warranty coverage but different from inframarginal consumers in their willingness to acquire information regarding warranty content. If, for instance, most consumers ignore warranties because the costs exceed the benefits of doing otherwise, the investment theory provides no reason to believe that the costs would be less or the benefits greater for that random sample of consumers who find themselves on the margin. In contrast, the assumption upon which the new exploitation theory is based — that marginal consumers have lower demand for warranty coverage — is not only consistent with the evidence, it may also suggest why marginal consumers are more sensitive to warranty terms than average consumers are. 409

Finally, the new exploitation theory survives a strong contractarian criticism of the old exploitation theory: "A principal weakness of the [old] exploitation theory is that it provides no theoretical link between market power and product warranty terms. Why would a firm with market power maximize its returns by offering one-sided warranty terms rather than . . . by charging a monopoly price?" 410 "[I]n theory, a monopolist (or a group of conspiring firms) will gain the greatest return by offering the consumer an optimal warranty, but at a price that exceeds marginal costs." 411 This general theoretical result does not obtain, however, in precisely those circumstances that, according to the investment theory, characterize the market for warranties: where marginal consumers demand less warranty coverage

409. See supra notes 400-04 and accompanying text. Schwartz and Wilde argue that Priest's evidence is also consistent with their search model. Like Priest's, however, Schwartz & Wilde's model assumes that the consumers responsible for ensuring that the optimal terms are provided are drawn randomly from the entire pool of consumers. See supra note 397 and accompanying text; Schwartz & Wilde, supra note 137, at 1403 ("Some consumers have sample sizes of one — they visit only one firm before buying — while others have sample sizes of two or more. We label these consumers 'nonsoppers' and 'shoppers,' respectively."); id. at 1426-27 ("Because consumers in our model shop randomly, each firm will probably see a representative sample of the market.").

410. Priest, supra note 12, at 1321; see also supra text accompanying notes 139-43.

411. Priest, supra note 12, at 1321.
than average consumers.\footnote{Priest criticizes the old exploitation theory also on the ground that the warranty terms he investigated do not appear to correlate with a firm’s market share or an industry’s concentration. \textit{Id.} at 1320–25. The relevant market-power variable in the new exploitation theory is the extent to which the preferences of marginal consumers differ from those of inframarginal consumers with respect to the relevant quality attributes. Priest’s empirical findings, therefore, shed little or no light on the new exploitation theory one way or the other. Priest shares the first generation’s intuition that consumer product warranties are exploitative: Most of us, I would imagine, share some intuitive feeling that manufacturers possess bargaining power superior to any consumer and that consumers have few opportunities to choose among warranty terms. This feeling accounts, I believe, for the popularity of the contract-of-adhesion and unfair bargaining power concepts in modern jurisprudence. Priest, \textit{supra} note 130, at 1399. Thus, Priest does not find the exploitation theory implausible on its face. Rather, he argues that it is theoretically “impressionistic and imprecise,” \textit{id.}, and that it does not account for the evidence. But the new exploitation theory not only comports with widely held intuitions; it also survives such criticisms.}{32}

3. \textit{Risk Distribution: The First-Party Insurance Externality}

The first generation argued that manufacturer-provided insurance through tort law was desirable because consumers had no other means of spreading the risks of product-caused accidents.\footnote{See supra section IV.B.3.} In the past several decades, however, first-party insurance has become increasingly widespread. The contractarians argue that, because these alternative forms of insurance are now widely available, manufacturer-provided insurance is unnecessary.\footnote{See supra section III.B.1.c.} Ironically, however, the claim that first-party insurance is now widely available provides a new justification for manufacturer-provided insurance. As has been argued elsewhere, there is reason to believe that first-party insurance largely removes from consumers and manufacturers incentives necessary for efficient investment in accident prevention.\footnote{See generally Hanson \& Logue, \textit{supra} note 11.}

Contractarians and regulators alike generally assume that consumers are insured through first-party mechanisms (including government-supported insurance) against most of the pecuniary risks of product accidents.\footnote{See, e.g., LANDES \& POSNER, \textit{supra} note 7, at 273; Priest, \textit{supra} note 9, at 1552, 1586-87. See generally Hanson \& Logue, \textit{supra} note 11.}{32} First-party insurers, however, rarely and imperfectly adjust premiums to reflect each consumer’s decisions concerning which products are purchased, how many of each product are purchased, or how carefully those products are consumed. The failure of first-party insurers to adjust premiums to reflect those consumption choices gives rise to the first-party insurance externality.\footnote{See generally Hanson \& Logue, \textit{supra} note 11.} To the extent that consumers are compensated for their pecuniary losses...
through first-party insurance and insurance premiums are not adjusted according to the risk of such losses, consumers will ignore those costs, externalizing them upon their first-party insurers. With respect to pecuniary losses, consumers cannot be made to prevent residually preventable accidents, regardless of the background liability standard. Taking care would impose on consumers costs with no offsetting benefits. Moreover, under a regime of free contracting, consumers will be unwilling to pay a higher price to compensate manufacturers for preventing initially preventable accidents. Manufacturers will write one-sided warranties and produce inefficiently unsafe products — not because consumers are ill informed and not because manufacturers are exploiting consumers, but because consumers simply will not demand efficient warranties or efficiently safe products. Furthermore, insofar as consumers externalize pecuniary accident costs, they will consume beyond a point where the true marginal costs of the product equal the marginal benefits; activity levels will be too high. In sum, the first-party insurance externality poses a potentially substantial obstacle to reformers' deterrence objectives.418

C. Reviving the Conclusion: Enterprise Liability to the Rescue

The previous section revived, in modified form, the first generation's premises concerning imperfect consumer information, exploitative manufacturer market power, and risk distribution. We attempt in this section to revive the case for enterprise liability by explaining how enterprise liability responds to those market imperfections.

1. Informing Consumers

Given that consumers are imperfectly informed, a goal of tort law should be to provide incentives for manufacturers, who are comparatively well informed, to inform consumers of a product's residually preventable and unpreventable risks so that consumers can adjust their care and activity levels to efficient levels.419 As will become clear, tort

418. See id. at 164-74. Both camps can be criticized for their assumption (often implicit) that first-party insurance does not blunt consumer incentives to minimize the costs of accidents. Moreover, those who call for some form of regulation can be criticized for failing to recognize the implications of that assumption. If first-party insurance worked perfectly — that is, if premiums were adjusted to reflect the expected accident costs of each insured's consumption choices — the market failures that advocates of regulation seek to avoid would evaporate, for consumers' first-party insurance premiums would act as a perfect signal to apprise them of the risks posed by the products they consume. For a description of how price communicates information in this context, see id. at 175.

Stephen Sugarman's proposal that we adopt a universal compensation scheme would simply recreate a first-party insurance externality in a slightly different form — the social insurance externality.

419. See VISCUSI, supra note 117, at 132-34. We assume in this section that manufacturers
law might be employed to serve that goal in two ways. The emerging consensus among products liability scholars seems to be that courts should adopt a *penalty default* approach, according to which manufacturers would, to avoid liability, inform consumers about product risks through warnings.\(^{420}\) If warning requirements are exculpatory, then manufacturers will, to avoid liability, provide warnings, and consumers will, to avoid the costs of injury, read, process, and heed those warnings.\(^{421}\)

We propose an alternative approach, enterprise liability, which would place on manufacturers the full costs of product-caused accidents. Insofar as consumers would respond to warnings, manufacturers seeking to minimize their liability costs would have an incentive to warn consumers of residually preventable accidents. Moreover, because a product's price would reflect the product's expected accident costs, price would act as an independent source of risk information.\(^{422}\) In two ways, then, manufacturers will inform consumers of both residually preventable and unpreventable risks. Under any regime less strict than absolute manufacturer liability (Row 4), a manufacturer will not otherwise be liable for, and thus will not inform consumers of, residually preventable risks, while under any regime less strict than strict liability (Row 3), manufacturers for the same reason will not inform consumers of unpreventable risks. Thus, given that consumers are uninformed, the relevant policy choice is between mutable absolute

have appropriate incentives to prevent initially preventable accidents and that consumers therefore need not be concerned about initially preventable accidents. To the extent that is not the case, enterprise liability seems likely to be the best means of ensuring that all initially preventable accidents will be prevented. That is true, first, because manufacturers are likely better informed than are consumers, courts, or regulators as to whether or not an accident is initially preventable, and, second, because enterprise liability serves as a form of performance bond, ensuring that manufacturers will make all cost-justified investments in identifying and preventing initially preventable accidents.

420. See supra note 208; see also, e.g., supra notes 168-69 and accompanying text (Huber); Schwartz, supra note 87, at 840-43; supra notes 222-25 and accompanying text (Landes and Posner); supra notes 245-52 and accompanying text (Viscusi); supra note 301 and accompanying text (Rose-Ackerman).

421. We will assume in this section that consumers are aware of the potential injury-reducing benefit of warnings. If they are not so aware, warnings will have no beneficial deterrence effect. See supra text accompanying notes 343-45.

422. Most products liability scholars recognize but ultimately ignore the price mechanism as a means of informing consumers. See, e.g., supra note 213 and accompanying text (Schwartz); supra notes 237-39 and accompanying text (Landes and Posner). Some scholars seem to consider the inefficiencies associated with overestimation beyond the reach of the price mechanism. See, e.g., Viscusi, supra note 117, at 64, 136. Yet price communicates risk information not only to consumers who otherwise underestimate risks but also to consumers who overestimate risks. The latter group too will adjust their consumption choices in response to the information provided by the price mechanism. To the extent that consumers know they will be compensated for their losses, they will disregard their own estimates of product risks. Of course, the efficacy of the price mechanism may be limited to the extent they will not fully recover for their nonpecuniary losses.
manufacturer liability (Box 7) and enterprise liability (Box 8). The choice involves several considerations.

One important consideration is whether one approach will yield more effective warnings than the other. A variety of tradeoffs complicates the task of designing warnings. For instance, it is difficult to know how substantively detailed warnings should be. Simple warnings that describe only a product's most significant risks are less complete but more easily retained by consumers:

Detailed examination of the information that individuals retain from hazard warnings indicates that even with very detailed and well-designed warning labels, individuals can seldom recall more than six pieces of information from a label. Much of what is retained regards aspects of the product other than precautions and risk levels—for example how to use the product. With the addition of more information, individuals eventually reach a saturation point.

There is a fundamental trade-off in terms of the information that is retained by consumer[s]. Those designing effective warnings must make that tradeoff successfully.

A similar tradeoff complicates the issue of how best to present a warning. On one hand, if its presentation is too bold, a warning will lead consumers to overestimate the product's risks. On the other hand, warnings can be so unobtrusive that consumers (like Claus Henningsen) overlook them. Here again, effective warnings require a delicate balance.

The efficiency of warnings turns on such tradeoffs. Viscusi argues, in defense of a Box 7 approach, that "[t]he best practical solution to the problem of competing risks of labeling is pre-testing the warning — its language and its presentation of information — for its ability to accomplish the intended objective." But Viscusi's solution depends on several questionable assumptions. First, he assumes that regulators who author warnings know, or can discover, how to accomplish the intended objective of a product warning. Because different consum-

423. See supra notes 370-372 and accompanying text.
424. VISCUS!, supra note 117, at 139-40. But see Schwartz, supra note 87, at 829 n.18 (questioning phenomenon of information overload).
425. VISCUS!, supra note 117, at 136 (presenting California cancer warning requirements as a "stunning example of overestimation of small risks identified in warnings").
426. Indeed, this is one of the concerns raised by the first generation but never addressed by the contractarians. See Henningsen v. Bloomfield Motors, 161 A.2d 69, 82, 84 (N.J. 1960) (observations concerning size and type of print used in purchase order contract).
427. VISCUS!, supra note 117, at 137; see also authorities cited supra note 370.
428. Viscusi explains that the intended objective of warnings in general terms "should be to convey the risk level, appropriate precautions, and an indication of the particular risks that will be reduced by these precautions. The ultimate intent is to influence the individual's decisions.
ers will have different costs of taking precautions and different responses to risk information, however, it is not obvious how regulators are to distinguish effective from ineffective warnings. At one point, Viscusi suggests that a product warning has served its objective when the product's sales drop substantially after the introduction of a warning, but that begs the question whether sales should drop and, if so, by how much. Second, even if regulators could determine a warning's precise objective, it is not clear how they would measure its success. Viscusi also overlooks the fact that, where warnings are exculpatory, a manufacturer would have an incentive to minimize a warning's effects in terms of both its substance and its presentation. The manufacturer not only would strive to no more than meet the exculpatory requirements but also would strive to undermine the warning's effects in its marketing of the product, for example by overloading consumers with information through product advertisements or instructions. Warnings are not the exclusive means by which a manufacturer can "inform" consumers.

Manufacturer-authored warnings provided in a regime of enterprise liability, in contrast, would not be subject to such shortcomings. Because manufacturers will be liable for any accidents that their products cause, they will strive to minimize the total costs of product-caused accidents. To the extent that consumers demand risk information, manufacturers will strike the optimal balance in the substance and presentation of warnings: market forces will ensure that warnings that are just right will survive over those that are not. Not only will

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Viscusi, supra note 117, at 134; see also id. at 144 (a warning is intended to "inform a product user of a risk and of behavior that will reduce that risk").

429. Id. at 138-39, 148-49.

430. See id. at 144-45.

431. Viscusi has criticized others for taking the same question-begging approach that he appears to take. He writes: "Reduced [sales] indicate[] a negative shift in attitudes toward a product, but it does not tell us whether the warning has been adequate or whether it has been unduly alarmist." Id. at 135.

Viscusi's recommendation that "[w]arnings assessments should be based on scientific principles rather than on conjecture of self-proclaimed expertise," id. at 144, is, by itself, of little practical use. He attempts to be more helpful by suggesting that

[one] procedure for evaluating [the] impact of warning labels is to apply the principles that have been developed in the scientific literature. This procedure is generally the simplest to undertake since no new research is required, but it is important to rely upon scientifically established principles for label design as opposed to conjecture.

Id. at 145. Without more, however, Viscusi's proposed procedure sheds little light on how regulators should assess the efficiency of warnings.

432. At one point, Viscusi seems to recognize this difficulty. See id. at 145 (noting that "the particular contribution of the warnings to changes in sales or behavior cannot be isolated").

433. This is another of the concerns raised by the first generation but not addressed by the contractarians. See supra notes 88-92 and accompanying text.
manufacturers strive to provide effective warnings, they will also avoid obscuring those warnings through their marketing efforts.

From a supply-side perspective, enterprise liability appears clearly superior to a Box 7 approach. Products liability scholars have ignored that benefit of enterprise liability, emphasizing instead what they believe to be the demand-side shortcoming of enterprise liability: under enterprise liability, consumers will have little or no incentive to take a product's risks into account because tort law will compensate them for their injuries regardless of the product warning. Under a Box 7 approach, in contrast, consumers will take warnings seriously because warnings shift the burden of accident costs onto consumers. Thus, to choose between Boxes 7 and 8, one must determine whether the supply-side shortcomings of Box 7 outweigh the demand-side shortcomings of Box 8—whether, in other words, it is worse that manufacturers have imperfect incentives to inform consumers or that consumers have imperfect incentives to respond to information. Careful scrutiny reveals that the choice is simpler than it may seem.

Considering first the risks of residually preventable accidents, a strong case can be made in favor of enterprise liability. To begin with, the demand-side shortcomings of enterprise liability as compared to a Box 7 approach are likely de minimis. That is true in part because a substantial component of most product-caused injuries is the nonpecuniary component. No scholar believes that tort damages fully compensate consumers for nonpecuniary losses. To that extent, consumers are not indifferent between the state of the world in which they are not injured and the state of the world in which they are injured but compensated for their injuries. Regardless of the liability regime, consumers will have significant incentives to acquire information about a product's residually preventable nonpecuniary risks. Moreover, the fact that consumers are compensated under enterprise

434. See, e.g., supra notes 243-44 and accompanying text (describing Viscusi's proposal to shift accident costs onto consumers in order to affect their behavior); supra notes 153-56 and accompanying text (summarizing contractarians' view that the trend toward enterprise liability was harmful in part because it was based on the false assumption that consumers had no significant role to play in accident prevention).

435. This is analytically similar to the question whether the supply-side shortcomings of a Box 6 approach, in which manufacturers are not liable for residually preventable accidents, are worse than the demand-side shortcomings of enterprise liability. Recall that under a Box 6 approach manufacturers will have no incentive to warn consumers of residually preventable accidents.

436. See, e.g., PATRICIA DANZON, MEDICAL MALPRACTICE 10 (1988) ("These are irreplaceable losses that cannot be recompensed by monetary compensation."); Viscusi, supra note 117, at 118 ("[C]urrent levels of products liability damages will never provide efficient levels of deterrence when it is life and limb at stake."); Epstein, supra note 43, at 653 ("[M]oney is an unsatisfactory substitute for health or wholeness."); Priest, supra note 29, at 8 ("[N]o personal injury can ever be fully compensated . . . .").
liability for their residually preventable pecuniary losses does not create a demand-side shortcoming as compared to Box 7. After all, most consumers have first-party insurance coverage against such risks. Regardless of the liability regime, the first-party insurance externality substantially weakens consumers’ incentive to acquire information about a product’s residually preventable pecuniary risks.

Thus, it does not appear that consumer demand for information about a product’s residually preventable risks would be significantly greater under a Box 7 regime than it would be under an enterprise liability regime. Indeed, the reverse might be true. If, under a Box 7 regime, consumers knew that courts were applying a Box 7 approach, they might recognize the potential supply-side shortcomings of such an approach. Consumers would invest less in reading, processing, and heeding product warnings because the returns of doing so would be reduced. If instead consumers are not aware that warnings may be exculpatory, they may behave just as they would under an enterprise liability regime.

Finally, and most important, because both approaches will fail to inform consumers adequately of some residually preventable accidents, Box 8 is superior to Box 7. Only under an enterprise liability regime will manufacturers prevent secondarily preventable accidents. Moreover, as we explain below, only under an enterprise liability regime will consumers adjust their activity levels to reflect the risk that some residually preventable accidents will not be prevented. For all of these reasons, enterprise liability appears to provide the most efficient response to the problem that consumers are imperfectly informed of residually preventable accidents.

The case for enterprise liability with respect to unpreventable accidents is even stronger. Ideally, consumers would purchase a product whenever the marginal benefits of the product exceeded its marginal costs. One ambition of tort law is to optimize activity levels by forcing consumers to take into account a product’s total costs, including the costs of unpreventable risks, when deciding whether to buy a product or how many units of the product to buy. With respect to unpreventable risks, a Box 7 approach is subject to the same supply-side and demand-side problems described above: manufacturers have incentives to misinform consumers, and consumers have attenuated incentives to become informed of product risks.

Enterprise liability, in contrast, circumvents such problems by substituting the price mechanism for warnings as the means of communicating risk information. With respect to unpreventable losses, enterprise liability both internalizes the first-party insurance exter-
ity and "informs" consumers of expected nonpecuniary losses by forcing manufacturers to pay for all product-caused accident costs. A product's nominal price will equal its true price, including its expected accident costs. For both pecuniary and nonpecuniary risks, therefore, consumers will optimize activity levels by purchasing a product only if its marginal benefits to the consumer exceed its price. Thus, even if consumers are not cognizant of an unpreventable risk, they will behave as if they were fully informed of it. With respect to unpreventable as well as residually preventable accidents, then, enterprise liability seems to offer the best response to the problems of imperfect consumer information.

2. Empowering Consumers

We argued in section IV.B.2 that manufacturers with market power may provide products that are less than optimally safe and warranties that are less than optimally generous insofar as manufacturers seek to satisfy the preferences of marginal consumers and insofar as marginal consumers demand less safety and insurance than inframarginal consumers do. The policy implication of this new exploitation theory is that contracts between consumers and manufacturers cannot be presumed efficient. That is, the market cannot be trusted — even where consumers are perfectly informed — always to ensure that manufacturers will supply the appropriate amount of deterrence and insurance. Consequently, the new exploitation theory provides a second justification for adopting a mandatory (Column II) liability standard. It does not, however, provide a basis for choosing among the possible liability standards (Rows 1-4). We shed light on that choice in the previous section about informing consumers and in the next section about insuring consumers, where we argue that absolute manufacturer liability (Row 4) is the most efficient standard.

437. See Hanson & Logue, supra note 11, at 171. Enterprise liability also overcomes the problem noted by some scholars that, even if consumers have information about a given risk, they may be unable to translate that risk information into monetary terms. See, e.g., W. Kip Viscusi, Structuring an Effective Occupational Disease Policy: Victim Compensation and Risk Regulation, 2 Yale J. on Reg. 53, 57-59 (1984).

438. Where consumers are informed of a specific product's risks, none of the information problems described in Section IV.B.1 will emerge. See Hanson & Logue, supra note 11, at 176-81 (explaining how enterprise liability will overcome the problems of unraveling and errors of omission and commission).

439. Professor Spence suggests that some nonmarket, survey-type information may be helpful in assessing the demand of all consumers, including inframarginal consumers, for product quality. See Spence, supra note 394, at 425. A jury may serve this purpose reasonably well. See generally Croley & Hanson, supra note 4, at 59-67; Croley & Hanson, supra note 9, at 64-66, 107-12 (both describing how juries are suitable appraisers of an injured consumer's nonpecuniary
3. Insuring Consumers

a. Redistributing pecuniary risks. The first generation argued that the dearth of first-party insurance against product-caused injuries justified a shift toward enterprise liability. The contractarians respond that the prevalence of first-party insurance against pecuniary losses justifies reversing the trend toward enterprise liability. In section IV.B.3 above, we argued that, insofar as first-party insurance does compensate consumers against the pecuniary costs of product-caused injuries, consumers, and, in turn manufacturers, externalize those costs. This first-party insurance externality has clear implications for both dimensions of the Products Liability Matrix.

First, this externality provides another justification for absolute manufacturer liability (Row 4). Because of the externality, consumers will not prevent residually preventable pecuniary losses and will not voluntarily adjust their activity levels to reflect the risk of pecuniary losses regardless of the background liability standard. The deterrence goal therefore becomes one of encouraging manufacturers to prevent secondarily preventable accidents and ensuring that activity levels reflect the costs of all unpreventable as well as unprevented residually preventable accidents. Absolute manufacturer liability is the only rule that will accomplish those goals. 440

Second, the first-party insurance externality provides another justification for a mandatory liability standard (Column II). Because of the first-party insurance externality, manufacturers will write one-sided warranties and produce inefficiently unsafe products, not because consumers are ill informed or because manufacturers are exploiting consumers, but because consumers themselves do not demand efficient warranties or efficiently safe products. Consumers already have adequate insurance against those losses and are rationally unwilling to pay for more. 441 The first-party insurance externality thus provides a clear justification for enterprise liability.

Very recently, Professors Priest and Schwartz each have expressed doubts about the empirical significance of this market failure, while granting its theoretical plausibility. 442 Both Priest and Schwartz argue that, insofar as first-party insurers pursue their rights of subrogation,

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440. See Hanson & Logue, supra note 11, at 168-73.
441. As described above, even if manufacturers or regulators provided ideal product warnings about pecuniary risks, consumers would have no incentive to take such warnings into account. See supra notes 417-18 and accompanying text.
442. See Priest, supra note 198, at 257-58; Schwartz, supra note 87, at 834 n.31.
no first-party insurance externality will exist. But this argument is based on a misunderstanding of the first-party insurance externality. Although by exercising their subrogation rights insurers would lower premiums paid by all insureds, they would not thereby affect any individual insured's consumption choices. The problem is not simply, as Priest and Schwartz apparently assume, that first-party insurance premiums are too high, but that they are not adjusted to reflect each insured's consumption choices.

Schwartz also observes that when the right of subrogation is "routinely exercised, product prices [will] reflect expected accident costs." That is of course true. But the observation merely concedes our point, for enterprise liability is the only liability standard to ensure that insurers will be able to exercise their right of subrogation successfully for all product-caused accidents. Thus, only under enterprise liability will product prices reflect the costs of all accidents. Where the liability standard is less strict, some of the costs of product-caused accidents will be externalized through first-party insurance.

443. See Hanson & Logue, supra note 11, at 190 n.231 (explaining the effects of subrogation rights on insurance premiums under an enterprise liability regime).

444. See supra notes 416-18 and accompanying text; see also Hanson & Logue, supra note 11, at 161 n.138.


446. Schwartz wrongly implies that were the law to shift back toward Box 1, insurance companies would exercise their rights of subrogation more often than they now do. Id. Schwartz simply has it backwards, as is apparent from the fact that, in a Box 1 regime, insurers would never exercise their right of subrogation against manufacturers. Schwartz also claims that "first-party insurers experience rate dangerous activities and often terminate consumers who incur large losses." Id. at 835 n.31. This argument fails to appreciate the fact that such experience rating is extremely uncommon in first-party insurance (except, perhaps, in automobile insurance policies). See Hanson & Logue, supra note 11, at 145-53, 191-95. Perhaps that explains why the only authority Schwartz offers for his assertion is an article on liability insurance. See Schwartz, supra note 87, at 834 n.31 (citing Gary Schwartz, The Ethics and Economics of Tort Liability Insurance, 75 CORNELL L. REV. 313, 320 (1990)).

Finally, Schwartz claims that the first-party insurance externality is of little significance because "consumers can reduce their exposure to risk and thus the amount of first party insurance they demand by eschewing dangerous activities." Schwartz, supra note 87, at 834 n.31. For example, "a consumer who decides not to fly small planes has less need for disability insurance." Id. As a consequence, according to Schwartz, "consumers who purchase dangerous items do incur a loss, the additional insurance they must buy. This loss in effect reinserts accident costs in product prices." Id. Schwartz's argument, however, largely assumes away the first-party insurance externality. That is, if a consumer already has disability insurance and the premiums for that insurance are not adjusted to reflect the consumer's consumption choices, then the consumer will not have to incur an added loss when she makes a risky consumption choice and she will enjoy no premium discount when she eschews a risky consumption choice. Moreover, it seems unlikely that consumers would sacrifice a significant amount of insurance coverage against all types of risks simply so that they can take advantage of the fact that they eschew certain consumption choices which pose, in the grand scheme of things, only a tiny risk. In any event, while consumers clearly cannot lower insurance costs under, say, a Box 1 regime by eschewing risky consumption choices, they clearly can do so under an enterprise liability regime: If consumers do not want to pay the costs of manufacturer-provided insurance under an enterprise liability regime, consumers could simply eschew a manufacturer's product.
b. Distributing nonpecuniary risks. There is no first-party insurance externality with respect to nonpecuniary losses because first-party insurance for such losses is relatively rare or, some say, nonexistent.\(^447\) Thus, the question remains whether enterprise liability can be justified on insurance grounds for nonpecuniary losses.\(^448\)

Insofar as enterprise liability compensates injured consumers for risks that are not or cannot be deterred, it serves only an insurance function. According to received wisdom, consumers do not demand insurance for nonpecuniary losses, as evidenced by the absence of a significant market for such insurance.\(^449\) If correct, the conventional wisdom implies that the deleterious insurance effects could outweigh the beneficial deterrence effects of an enterprise liability regime in which damages include nonpecuniary losses. In a subsequent article, we hope to challenge the seemingly unanimous view that consumers do not demand nonpecuniary-loss insurance.\(^450\) If we are correct that consumers do demand some nonpecuniary-loss insurance, the fact that the market does not meet that demand revives in original form the first generation's risk distribution justification for the shift toward enterprise liability. But even a conclusion that consumers do not demand such insurance would by no means undermine the case for enterprise liability. At most, it would imply that damages under such a regime should be reduced to cover only the pecuniary component of unpreventable accidents.\(^451\) Critics of enterprise liability seem to miss this point.\(^452\)

CONCLUSION

This article has sought to accomplish three general goals: (1) to identify and shed light on the fundamental questions of products liability law; (2) to respond to the arguments offered by, and to expose the tensions within, the two reformist groups of products liability

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\(^448\). Section IV.C.1 made the case for enterprise liability for nonpecuniary losses on deterrence grounds; see also Croley & Hanson, *supra* note 4, at 67-75 (describing the activity-level benefits of an enterprise liability regime in which nonpecuniary-loss damages are awarded); Hanson & Logue, *supra* note 11, at 186-88 (describing the "unambiguous deterrence benefits of nonpecuniary-loss damages under enterprise liability").

\(^449\). See, e.g., authorities cited *supra* note 447.

\(^450\). See Croley & Hanson, *supra* note 9; see also Croley & Hanson, *supra* note 4, at 59-67 (sketching the argument that consumers may demand nonpecuniary-loss insurance).

\(^451\). Of course, it might not imply even that much, given that the beneficial deterrence effects of awarding nonpecuniary-loss damages for unpreventable accidents may outweigh the deleterious insurance effects.

\(^452\). See, e.g., Priest, *supra* note 9, at 1553.
scholars; and (3) to rescue the products liability revolution by reviving (in new robes) the premises of the first generation of products liability scholars and thereby providing an affirmative case for enterprise liability. Part I introduced the Products Liability Matrix, a simple, two-dimensional matrix depicting the possible products liability regimes and framing the debate. Part II described the evolution of products liability law toward enterprise liability along the matrix's two dimensions. Part III reviewed the contractarian critique of the premises underlying the trend toward enterprise liability and then, by attempting to locate several influential scholars in the Matrix, provided a critique of the views of members of the contractarians' and regulators' camps. Finally, Part IV revived the first generation's premises and, based on those premises, provided an affirmative argument in favor of enterprise liability.

This article began with the observation that, notwithstanding their many differences, the contractarians and the regulators share two basic premises: (1) the products liability regime should satisfy the consumer sovereignty norm, and (2) the present regime is in need of reform, because the products liability revolution the first generation began led to destructive consequences. As the analyses in Part III showed, however, fundamental questions remain unanswered by the current debate. Are there market imperfections that justify regulating consumer product markets? If so, what role should tort law play in responding to those market imperfections? What should the liability standard be? Should it be mutable? Until these questions are answered, lawmakers lack any sound basis for products liability reform.453

We have argued that at least three significant market imperfections seem to justify regulation and that enterprise liability may well provide an efficient response to those market imperfections. We can be fairly criticized, however, for having adopted a "tortcentric" approach: We have failed fully to consider the possible role of administrative regulation in responding to these same market failures.454 In our view, however, it is more important now to respond to the antitort approach of those products liability scholars whose views on reforming tort law are being embraced by lawmakers but whose views on reforming administrative regulation are being ignored.

In any event, our ambition has not been to "prove" that enterprise liability is the best of all possible worlds. Nor has our ambition been

453. Contrary to the belief of some, economic analysis of products liability does not lead one inevitably to the conclusion that comprehensive reform is in order.

454. See Stewart, supra note 130 (coining the term tortcentric).
to make an unqualified argument for enterprise liability in every case. (For instance, none of the market failures we have identified would be at work in cases of intentional self-inflicted product-related injuries.) Instead, we have aimed to stimulate dialogue among products liability scholars by showing that if indeed other tort regimes are superior to enterprise liability, or if indeed other regulatory institutions are superior to tort law, then that is true for reasons other than those either the contractarians or the regulators have so far supplied. We agree wholeheartedly with one scholar’s recent observation that some demonstration that the first generation was misguided is “a necessary prelude to serious reform.”455 We have argued here that the music really has not begun. Given the present state of the thinking among products liability scholars, there is no compelling case for radical reform of the regime.

While the changes instigated by Justice Traynor admittedly did not make for a perfect products liability regime, perhaps the vice of the first generation was not overambition but underambition: The first generation may not have gone far enough in its attempt to overcome market failures in consumer product markets. Rather than return to the Winterbottom or MacPherson regime, and rather than abandon tort law as a means of regulating the allocation of product risks, perhaps judges and legislators should instead move products liability all the way to Box 8 — enterprise liability.

455. Schwartz, supra note 87, at 819.