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Products Liability--An Analysis of Market Share Liability

David A. Fischer
University of Missouri School of Law, fischerd@missouri.edu

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I. INTRODUCTION

*David A. Fischer**

In *Sindell v. Abbott Laboratories*[1] the Supreme Court of California created the market share liability theory of recovery for products liability cases. The innovative *Sindell* theory, which applies to certain products liability cases in which causation is either questionable or difficult to prove, departed significantly from the traditional tort principles of causation and liability. The theory allows plaintiffs to recover damages for their injuries, but it discounts the defendant's liability by the probability that it did not cause the harm. Liability under the market share theory is potentially enormous. Although it currently applies to only a narrow range of cases, the theory—if expanded further—could have a tremendous effect on tort law as a whole.

The problem that gave rise to the creation of market share liability resulted from the marketing of a drug known as diethylstilbestrol (DES), which is a synthetic form of the female hormone estrogen.[2] Between 1947 and 1971, the drug was used widely to prevent miscarriage. In 1971, however, the Food and Drug Administration, after receiving statistically significant evidence of a causal connection between the use of DES and the subsequent development of vaginal and cervical clear cell adenocarcinoma—a rare form of cancer—in the female offspring of DES users,[3] withdrew approval of the drug's use for this purpose.[4] In the twenty-four years preceding the agency's withdrawal of approval, an estimated one-half million to three million users of DES had exposed

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* Professor of Law, University of Missouri-Columbia. B.A., 1965, J.D., 1968, University of Missouri-Columbia. Member, Missouri Bar.

1. 26 Cal. 3d 588, 607 P.2d 924, 163 Cal. Rptr. 132, *cert. denied*, 449 U.S. 912 (1980).

2. Comment, *DES and a Proposed Theory of Enterprise Liability*, 46 FORDHAM L. REV. 963 (1978).

3. Herbst, Cole, Norusis, Welch & Scully, *Epidemiologic aspects and factors related to survival in 384 Registry cases of clear cell adenocarcinoma of the vagina and cervix*, 135 AM. J. OBSTET. GYNECOL. 876 (1979); Comment, *supra* note 2, at 964.

4. Comment, *supra* note 2, at 965-66.

their offspring to the drug's dangers.[5]

A far more common disorder than adenocarcinoma that daughters of DES users have experienced is vaginal adenosis, which is a disorder that results from the growth of columnar epithelium or mucinous products in the vagina[6]—apparently normal tissue that has developed in an abnormal location.[7] Doctors once suspected that this tissue growth was a precancerous condition. Some recent medical literature, however, indicates that the growth is not precancerous,[8] and that it often disappears spontaneously.[9]

Potential monetary damages to the offspring of DES users are estimated to be in the billions of dollars.[10] The true extent of the harm that the use of DES by pregnant women has caused, however, is unclear, since doctors have reported relatively few actual cases of DES-related cancer. A worldwide registry of women suffering from adenocarcinoma indicates that only 384 of the women who have contracted the disease were born between 1940 and 1971.[11] Moreover, only 213 of these cases were associated with the use of DES.[12] All 213 cases may not have been caused by DES, however, because the evidence suggesting a causal connection between the use of DES by pregnant women and the subsequent development of adenocarcinoma in their offspring is not definitive.[13] New cases almost certainly will develop in the future, but probably at a diminished rate,[14] since the number of new cases peaked in the middle 1970s.[15] Of course, a second peak conceivably could develop in the future,[16] but available information does not indicate that this will happen.

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5. Comment, *supra* note 2, at 965 & n.6.

6. R. EPSTEIN, MODERN PRODUCTS LIABILITY LAW 158 (1980); Note, *Beyond Enterprise Liability in DES Cases*-Sindell, 14 IND. L. REV. 695, 696 & n.12 (1981); Interview with Dr. A.L. Herbst, *reprinted in* 30 Ca-A-Cancer J. for Clinicians 326 (1980) [hereinafter cited as Interview].

7. Interview, *supra* note 6, at 329.

8. R. EPSTEIN, *supra* note 6, at 158; Note, *supra* note 6, at 696 n.12; Interview, *supra* note 6, at 329.

9. Note, *supra* note 6, at 696 n.12; Interview, *supra* note 6, at 329.

10. Henderson, *Products Liability, DES Litigation: The Tidal Wave Approaches Shore*, 3 CORPORATION L. REV. 143, 143 (1980); Comment, *supra* note 2, at 968 & n.21; Note, *A Remedy for the "DES Daughters": Products Liability Without the Identification Requirement*, 42 U. PITT. L. REV. 669, 691 (1981).

11. Herbst, Cole, Norusis, Welch & Scully, *supra* note 3, at 877.

12. *Id.*

13. Note, *supra* note 6, at 713-14; Interview, *supra* note 6, at 331.

14. Herbst, Cole, Norusis, Welch & Scully, *supra* note 3, at 882.

15. *Id.*; Interview, *supra* note 6, at 327.

16. Herbst, Cole, Norusis, Welch & Scully, *supra* note 3, at 883.

Plaintiffs in DES lawsuits—the female offspring of DES users—face a number of obstacles in their efforts to obtain some form of recovery for the injuries that they have sustained. One of their major impediments is trying to prove that a particular manufacturer was the source of the DES that the plaintiff's mother consumed. To establish a cause of action under either a negligence or a strict liability theory, the plaintiff typically must demonstrate that the defendant produced the product which caused the harm.[17] Since any physical damage that DES has caused will not surface until the daughter of a DES user experiences one of the disorders, the harm often is discovered only after a prolonged period of latency. Furthermore, DES is a generic drug that as many as 300 different companies—using a common formula[18]—manufactured.[19] At the time the drug was on the market, pharmacists filled prescriptions by using any brand of DES that they happened to have on the shelf.[20] Unfortunately, the pharmacists' records often are inadequate to identify the source of the drug.[21] In many DES cases, therefore, the plaintiff is unable to prove that a certain defendant actually produced the particular product that caused the harm.[22]

Many DES cases currently are pending,[23] but most of them are not yet at the stage of attempting to resolve the causation issue. The few decided cases have dealt with the problem in a variety of ways. The majority of them have found for the defendant when the plaintiff has been unable to identify the source of the drug.[24] In a few cases, however, the court has found for the plaintiffs by straining traditional tort theories such as alternative liability.[25] The alternative liability theory shifts the burden of proof on the element of causation to the defendants when the facts indicate that all the defendants are wrongdoers, but that only one of

17. *See, e.g.*, Namm v. Charles E. Frosst & Co., 178 N.J. Super. 19, 427 A.2d 1121 (App. Div. 1981).

18. 4 AM. J. TRIAL ADVOCACY 492, 493 (1980).

19. *See* note 137 *infra*.

20. 4 AM. J. TRIAL ADVOCACY, *supra* note 18, at 493.

21. *See, e.g.*, Bichler v. Eli Lilly & Co., 79 A.D.2d 317, 436 N.Y.S.2d 625 (App. Div. 1981).

22. Comment, *supra* note 2, at 972.

23. *Id.* at 967; Note, *Industry-Wide Liability*, 13 SUFFOLK U.L. REV. 980, 1015 n.189 (1979).

24. 4 AM. J. TRIAL ADVOCACY, *supra* note 18, at 492.

25. *See, e.g.*, Ferrigno v. Eli Lilly & Co., 175 N.J. Super. 551, 420 A.2d 1305 (Law Div. 1980). The court also has strained the concert of action theory as a method of imposing liability in DES cases. 4 AM. J. TRIAL ADVOCACY, *supra* note 18, at 493.

them—whose identity is unclear—caused the harm.[26] Although the Supreme Court of California in *Sindell* recognized that these traditional theories are unsatisfactory in a DES context,[27] it nevertheless felt that plaintiffs should not be denied recovery for the injuries they had suffered. The court thus created the market share liability theory, which in effect is a modified version of the alternative liability theory.

Market share liability, as formulated in the *Sindell* decision, permits plaintiffs to recover from DES manufacturers without identifying the manufacturer of the particular drug that the plaintiff's mother consumed. The plaintiff is required to join a sufficient number of manufacturers in the action to ensure that a "substantial share" of the market is represented.[28] Once the plaintiff has met this duty, the burden of proof shifts to each defendant to establish that it could not have produced the drug which caused the harm in question.[29] Any defendant who fails to exonerate itself, therefore, is liable to the plaintiff for her damages,[30] which are apportioned among the defendants according to each one's relative market share.[31] Thus, under the *Sindell* court's theory, recovery is permitted through a relaxation of traditional common-law proof requirements.

The market share liability theory possesses great superficial appeal. Innocent plaintiffs are allowed to recover, and, since each defendant's damages are apportioned according to the amount of harm attributable to it, the defendants seemingly are treated fairly as well. The *Sindell* court reasoned that the use of DES to prevent miscarriage causes harm in a certain percentage of cases. Therefore, according to the court, a defendant who produced ten percent of the DES that was placed on the market to prevent miscarriage statistically would be likely to have caused ten percent of the harm. Thus, if the court apportioned damages according to each defendant's market share, then theoretically each defendant would be held liable only for approximately as much harm as it caused.

This Article examines the market share liability theory to determine whether it can achieve the objective of treating both par-

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26. RESTATEMENT (SECOND) OF TORTS § 433B(3) (1965).

27. Sindell v. Abbott Laboratories, 26 Cal. 3d 588, 601-10, 607 P.2d 924, 930-35, 163 Cal. Rptr. 132, 138-43, *cert. denied*, 449 U.S. 912 (1980).

28. *Id.* at 611-12, 607 P.2d at 937, 163 Cal. Rptr. at 145.

29. *Id.*

30. *Id.* at 612, 607 P.2d at 937, 163 Cal. Rptr. at 145.

31. *Id.*

ties fairly. Although courts in the past have relaxed the plaintiff's burden of proof on the element of causation in fact,[32] the question remains whether this relaxation is appropriate in DES cases, and, if so, whether market share liability is the most equitable method of implementing the relaxation. This Article suggests that the market share liability theory contains several serious flaws that render it unsuitable as a means for allowing plaintiffs to recover in DES cases. The Article criticizes the theory for diluting the elements of the alternative liability doctrine to the extent that the market share theory fails to meet the alternative liability theory's primary objective of allocating responsibility according to each defendant's share of the fault.[33] Moreover, the additional objective of market share liability—to implement the modern notions of risk spreading and deterrence that underlie the law of products liability—is not achieved through the market share theory because the theory's requirements were derived from alternative liability, which was designed to accomplish a different objective. The Article further criticizes the theory because it permits courts and juries to resolve cases without adequate evidence.[34]

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32. In *res ipsa loquitur* cases, for example, some courts have relaxed the exclusive control requirement in those multiple defendant cases in which either the status of the defendant or the relationship of the defendants to the plaintiff justifies the relaxation. *See, e.g.*, Ybarra v. Spangard, 25 Cal. 2d 486, 154 P.2d 687 (1944). Other courts have shifted the burden of proof to the defendants to apportion damages in those situations in which no evidence is available to aid the court in making this determination. *See, e.g.*, Maddux v. Donaldson, 362 Mich. 425, 108 N.W.2d 33 (1961); *see* RESTATEMENT (SECOND) OF TORTS, *supra* note 26, § 433B(2).

The alternative liability doctrine, which appears to have had its genesis in the landmark case of Summers v. Tice, 33 Cal. 2d 80, 199 P.2d 1 (1948), applies when several defendants have acted negligently toward the plaintiff—who sustains an injury—and only one of the defendants could have caused the harm. The theory shifts the burden of proof to the defendants to show that they were not respousible for the injury. Those defendants who are unable to exculpate themselves are jointly and severally liable for all the plaintiff's damages. *See* notes 44-71 *infra* and accompanying text.

The court in Hall v. E.I. Du Pont De Nemours & Co., 345 F. Supp. 353 (E.D.N.Y. 1972), suggested yet another possible method for recovery—the enterprise liability theory. In *Hall* some unidentifiable blasting caps injured several children, and plaintiffs joined all six American manufacturers of blasting caps as defendants. Plaintiffs were not able to identify which of the defendants had made the blasting caps that caused the injuries to each plaintiff. The court imposed joint liability on all defendants, in part because defendants had adhered to an inadequate industry-wide safety standard. In other words, under the *Hall* court's scheme, joint liability is based on joint control over the risk. The enterprise liability theory has received limited acceptance among the courts, but legal scholars have cited it widely. *See, e.g.*, Comment, *supra* noto 2, at 995-1007; Note, *supra* note 6, at 704.

33. For a discussion of the fault system under the alternative liability theory, see notes 93-109 *infra* and accompanying text.

34. *See* notes 134-49 *infra* and accompanying text.

After an initial examination of the purposes of the causation in fact requirement, this Article compares the objectives and requirements of alternative liability with those of market share liability to evaluate the suitability of the latter as a theory of recovery. The Article then examines the requirements of market share liability and the proof problems in DES cases to determine whether the doctrine in fact is able from a practical standpoint to apportion the plaintiff's damages according to each defendant's share of the market. Finally, the Article discusses the effect of market share liability on products liability law as a whole.

II. Origin and Nature of Market Share Liability

A. *Purposes of the Causation in Fact Requirement*

Both the alternative liability theory and the market share liability theory relax the traditional principle in tort law which imposes upon the plaintiff the burden of proving that the defendant's action was at least a cause in fact of the injury that the plaintiff sustained. Therefore, the appropriate way to begin a comparison of these doctrines is to review briefly the relevant purposes that the causation in fact requirement serves. Initially, however, it should be noted that causation in fact is not necessary to further the traditional tort goals of deterrence and compensation.[35] To illustrate, suppose a falling tree that had been struck by lightning injured plaintiff. If plaintiff were able to establish that a railroad company was negligent in failing to equip its locomotive with a whistle, a court could further the tort policies of compensation and deterrence by imposing liability for plaintiff's injury upon the railroad company, even though no causal connection existed between the company's negligence and plaintiff's injury. As long as the railroad company understood that liability was being imposed upon it because of its negligence, it would have an incentive to equip its locomotives properly in the future.[36] At the same time, requiring the railroad company to compensate the injured party would further society's interest in compensating accident victims. In this case, however, the railroad company would not be liable because the plaintiff would be unable to prove a causal connection between his injury and the company's negligence. Clearly, then, the policies

35. Epstein, *Products Liability: The Search for the Middle Ground*, 56 N.C.L. Rev. 643, 659-60 (1978); Klemme, *The Enterprise Liability Theory of Torts*, 47 U. Colo. L. Rev. 153, 163-65 (1976).

36. Klemme, *supra* note 35, at 164-65.

giving rise to causation in fact are not based upon the desirability of deterrence and compensation.

A major function of the causation in fact requirement is to limit the scope of potential liability.[37] Unquestionably, the law seeks to compensate accident victims and discourage socially undesirable activity, both of which usually can be advanced by imposing liability upon the party at fault. Society's need to protect the interests of potential defendants, however, must be balanced against these policies; if a defendant's potential liability is excessive, then its useful conduct might be inhibited along with its undesirable behavior. The previous example illustrates this point. If a railroad could be held liable for the harm that the lightning caused simply because it had a defective whistle, then it conceivably could be held liable for any damages that an individual sustained anywhere in the world. The threat of this liability undoubtedly would discourage people from engaging in railroading and other useful but potentially dangerous activities. This discouraging effect, which is clearly undesirable, can be appropriately referred to as "over-deterrence." Thus, the causation in fact requirement is one way in which the law limits the scope of liability and attempts to avoid discouraging socially desirable activity.[38]

The role that the causation in fact requirement plays in limiting the scope of potential liability is an important consideration in evaluating the effectiveness of the market share liability doctrine. As explained above, the doctrine permits a defendant to be held liable for harm that others have caused. To the extent that the doctrine allows a defendant to be held liable for more harm than it in fact caused, the theory potentially has an unduly inhibiting effect.[39]

Causation in fact also serves the function of assessing moral blame.[40] One of the purposes of tort law is to resolve disputes among individuals and thereby discourage self-help remedies.[41] To achieve this objective, the law must reflect popular notions of moral responsibility, and people often associate moral blame[42] and

37. W. PROSSER, HANDBOOK OF THE LAW OF TORTS 236-37 (4th ed. 1971).

38. W. PROSSER, *supra* note 37, at 237, 239.

39. *See* part IV *infra*.

40. H. HART & A. HONORÉ, CAUSATION IN THE LAW 59 (1959); *see* Malone, *Ruminations on Cause-In-Fact*, 9 STAN. L. REV. 60, 66 (1956).

41. W. PROSSER, *supra* note 37, at 17, 492.

42. H. HART & A. HONORÉ, *supra* note 40, at 59-60.

responsibility[43] with causation in fact. Thus, if X borrows Y's car and damages it in an accident, both X and Y are likely to feel intuitively that fairness requires X to repair the damage. This reaction is to be anticipated even if the accident was not X's fault. Y typically would consider X responsible for the damage to his car simply because X was driving when the accident occurred; if X had not borrowed the car, it presumably would not have been involved in an accident.

This relationship between causation and moral blame can be illustrated more clearly in the criminal context, since in these cases the need to compensate the victim does not cloud the issue. As in civil law, in criminal law personal culpability—such as negligence or intentional misconduct—provides an independent basis for assessing moral blame. A court can impose criminal responsibility upon a defendant even in the absence of harm—for example, reckless driving and attempted murder. On the other hand, if the conduct does result in serious harm, the degree of blame that is attached to that conduct increases proportionately. A reckless driver whose careless driving kills a child is likely to receive a much more severe penalty in a prosecution for manslaughter than is a reckless driver who narrowly avoids hitting the child. Similarly, a criminal who kills his victim will be punished more harshly in a prosecution for murder than one who fails. The degree of moral blame, then, is a function of the antisocial nature of the defendant's act, which may be referred to as "culpability-based blame," and the amount of harm that the act causes, which may be referred to as "causal blame."

The moral blame function of the causation in fact requirement is useful in an evaluation of the alternative liability and market share liability theories. Although moral blame is an important element of the former theory, it is of little importance to market share liability because this theory significantly dilutes the elements of its progenitor.

B. Alternative Liability

The Supreme Court of California adopted the alternative liability theory in the leading case of *Summers v. Tice*.[44] A number of other courts have followed the approach,[45] and the *Restatement*

43. Malone, *supra* note 40, at 66.
44. 33 Cal. 2d 80, 199 P.2d 1 (1948).
45. *See, e.g.*, Annot., 5 A.L.R.2d 98 (1949) and supplements.

(Second) of Torts adopted it in section 433B(3).[46] Defendants in *Summers* were two hunters who negligently fired their shotguns in plaintiff's direction at the same time. Plaintiff was hit in the eye with a single shotgun pellet, but he was unable to identify the gun from which the pellet was fired. Under the traditional common-law rule, plaintiff would have had to establish that a particular defendant was more likely than not the cause of plaintiff's harm.[47] Since both defendants were equally likely to have caused the harm, however, the court's application of this rule would have resulted in a directed verdict for defendants.[48] Thus, the California Supreme Court in *Summers* expressly rejected the traditional rule and held that when one of two or more defendants injures the plaintiff, but the evidence is insufficient to allow the plaintiff to establish which of them is the culpable party, then the burden of proof shifts to the defendants to establish their innocence.[49] Under the *Summers* court's scheme, the plaintiff must join as defendants all those persons who potentially might have caused the harm.[50] In addition, all the joined defendants must have acted in a tortious manner,[51] which typically has meant simple negligence,[52] even though the *Restatement* rule is broad enough to encompass both intentional and strict liability torts.[53] If these two requirements are met, then each

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46. RESTATEMENT (SECOND) OF TORTS, *supra* note 26, § 433B(3).

47. *Id.* Comment a.

48. Commentators had criticized this result in advance of the *Summers* case. *See* Prosser, *Joint Torts and Several Liability*, 25 CALIF. L. REV. 413, 441-42 (1937). Some courts had avoided the outcome by straining to find liability under a concert of action theory. *See, e.g.*, Oliver v. Miles, 144 Miss. 852, 110 So. 666 (1926).

49. 33 Cal. 2d at 86, 199 P.2d at 4.

50. Ryan v. Eli Lilly & Co., 514 F. Supp. 1004, 1016 (D.S.C. 1981); Namm v. Charles E. Frosst & Co., 178 N.J. Super. 19, 427 A.2d 1121 (1981); *see* RESTATEMENT (SECOND) OF TORTS, *supra* note 26, § 433B(3), Comment h; Note, *Manufacturers' Liability Based on a Market Share Theory*: Sindell v. Abbott Laboratories, 16 TULSA L.J. 286, 291 (1980); 94 HARV. L. REV. 668, 672 (1981); 38 WASH. & LEE L. REV. 139, 143 (1981).

51. Wetzel v. Eaton Corp., 62 F.R.D. 22 (D. Minn. 1973); Raber v. Tumin, 36 Cal. 2d 654, 226 P.2d 574 (1951); Garcia v. Joseph Vince Co., 84 Cal. App. 3d 868, 148 Cal. Rptr. 843 (1978); Petersen v. Parry, 92 Idaho 647, 448 P.2d 653 (1968); Derouen v. American Employers Ins. Co., 118 So. 2d 522 (La. App. 1960); Namm v. Charles E. Frosst & Co., 178 N.J. Super. 19, 427 A.2d 1121 (1981); W. PROSSER, *supra* note 37, at 243; RESTATEMENT (SECOND) OF TORTS, *supra* note 26, § 433B(3), Comment g.

52. *See, e.g.*, Wetzel v. Eaton Corp., 62 F.R.D. 22 (D. Minn. 1973); Raber v. Tumin, 36 Cal. 2d 654, 226 P.2d 574 (1951); Garcia v. Joseph Vince Co., 84 Cal. App. 3d 868, 148 Cal. Rptr. 843 (1978); Petersen v. Parry, 92 Idaho 647, 448 P.2d 653 (1968); Derouen v. American Employers Ins. Co., 118 So. 2d 522 (La. App. 1960).

53. *See* RESTATEMENT (SECOND) OF TORTS, *supra* note 26, § 433B(3). The *Restatement* provision applies to "tortious" conduct. Section 6 of the *Restatement* defines this conduct broadly enough to include any conduct that is sufficient to subject an actor to liability in tort.

defendant must prove that he did not cause the harm or else be jointly and severally liable with the other defendants for the full amount of the plaintiff's damages.[54]

Some courts have indicated that additional requirements must be met for a plaintiff to recover under an alternative liability theory. The *Summers* court itself, for example, apparently would require that the defendants must be in a better position than the plaintiff to offer evidence on the issue of causation.[55] Authority also exists for the proposition that the burden of proof will not shift unless the defendants are responsible for the plaintiff's inability to prove causation.[56] Other courts, however, have not required either of these elements.[57]

Alternative liability is a fault-based doctrine[58] in the sense that moral blame attaches under the theory once the defendants have failed to prove their innocence. Indeed, many authorities appear to rely upon the defendant's moral blame as a major justification for the imposition of liability. In *Summers*, for example, the court stated, "[T]hey are both wrongdoers—both negligent toward plaintiff. They brought about a situation where the negligence of one of them injured the plaintiff, hence it should rest with them each to absolve himself if he can."[59] Similarly, the reporters for the *Restatement* in their official comments declared that it would be an injustice to permit "proved wrongdoers, who among them have inflicted an injury upon the entirely innocent plaintiff to escape liability merely because the nature of their conduct and the resulting harm has made it difficult or impossible to prove which of them has caused the harm."[60] Other authorities point out the unfairness of allowing an entirely innocent plaintiff to go without a remedy even though one of two proven wrongdoers clearly caused the harm.[61] These courts and commentators view the alternative

54. *See, e.g.*, Summers v. Tice, 33 Cal. 2d 80, 88, 199 P.2d 1, 5 (1948).

55. *Id.* at 86, 199 P.2d at 4. *See also* Ryan v. Eli Lilly & Co., 514 F. Supp. 1004 (D.S.C. 1981); Namm v. Charles E. Frosst & Co., 178 N.J. Super. 19, 427 A.2d 1121 (App. Div. 1981).

56. *See, e.g.*, Ryan v. Eli Lilly & Co., 514 F. Supp. 1004, 1016 (D.S.C. 1981); Namm v. Charles E. Frosst & Co., 178 N.J. Super. 19, 427 A.2d 1121 (App. Div. 1981); RESTATEMENT (SECOND) OF TORTS, *supra* note 26, § 433B(3), Comment f.

57. *See, e.g.*, Abel v. Eli Lilly & Co., 94 Mich. App. 59, 289 N.W.2d 20 (1980); Ferrigno v. Eli Lilly & Co., 175 N.J. Super. 551, 420 A.2d 1305 (Law Div. 1980).

58. *See* Note, *supra* note 6, at 705.

59. Summers v. Tice, 33 Cal. 2d 80, 86, 199 P.2d 1, 4 (1948).

60. RESTATEMENT (SECOND) OF TORTS, *supra* note 26, § 433B, Comment f.

61. Abel v. Eli Lilly & Co., 94 Mich. App. 59, 73, 289 N.W.2d 20, 25 (1980); A. BECHT & F. MILLER, THE TEST OF FACTUAL CAUSATION IN NEGLIGENCE AND STRICT LIABILITY CASES

liability theory as a means of circumventing the traditional burden of proof requirement, which they consider to be a technicality that is an impediment to justice in situations giving rise to alternative liability.

The fairness argument is particularly compelling in these situations because moral blame is usually quite prevalent: the plaintiff has been injured and at least one of the defendants is responsible. The *Summers* case provides a perfect example because both elements of moral blame—culpability-based and causal blame—were present.[62] Culpability-based blame was present because each defendant's conduct was unquestionably of an antisocial nature. Causal blame existed because one of the defendants clearly caused the harm, and plaintiff suffered a severe injury. In fact, the presence of causal blame in alternative liability cases is particularly crucial. Courts routinely deny recovery in cases in which the causal blame factor is diminished, as in those cases in which no basis exists for deciding whether a negligent defendant or an innocent source caused the harm in question.[63]

Clearly, then, the alternative liability theory does not defeat the functions of the causation in fact requirement for liability in tort. Allocation of responsibility according to moral blame admittedly is diluted under the doctrine, but it is not significantly impaired. As stated above, a plaintiff under the traditional rule must prove that the existence of causation is more probable than not.[64] In other words, the probability that the defendant's conduct was at least a cause in fact of the harm in question must be greater than fifty percent. In the typical alternative liability case with two joined defendants, the probability that each caused the harm is exactly fifty percent.[65] The alternative liability theory thus requires only a slight reduction in the degree of proof that the courts traditionally have required on the issue of causation in fact. If a fifty-one percent probability of causation is sufficient to impute blame, then a fifty percent probability of causation should also be sufficient, even though the degree of culpability may be reduced. When three defendants are involved in the action, the probability that each caused the harm is lowered to one-third. This situation dic-

105 (1961); W. PROSSER, *supra* note 37, at 243; Malone, *supra* note 40, at 83-84.

62. *See* notes 40-43 *supra* and accompanying text.

63. RESTATEMENT (SECOND) OF TORTS, *supra* note 26, § 433B(1), Comment a, Illustration 2.

64. *Id.* § 433B, Comment a.

65. A. BECHT & F. MILLER, *supra* note 61, at 104.

tates a much greater relaxation of the burden of proof,[66] but the probability of causation is still high enough to impute some causal blame to all three defendants.

To illustrate, if a single hunter negligently fires in the direction of the plaintiff, but no harm results, most people intuitively would perceive his conduct as less culpable than if he had hit the plaintiff. On the other hand, if the hunter actually wounds the plaintiff, the existence of harm, which his negligence has caused, would significantly alter his situation. The position of each hunter in *Summers* is far more analogous to the single hunter who hits the plaintiff than to the one who misses him. In *Summers* plaintiff sustained a serious injury because of someone's culpable conduct; the only question was which of the two defendants caused the harm. When considered separately, a substantial chance existed that each hunter caused the harm.[67] That only one of them actually was responsible for the injury does not seriously mitigate the moral blame that is attached to each hunter because of his culpable conduct and the resultant serious harm to the plaintiff.

As stated above, an important function of the causation in fact requirement is to restrict the scope of potential liability.[68] The alternative liability theory does not contravene this function; rather, it sufficiently limits the number of potential defendants and avoids the problem of excessive liability. Alternative liability cases almost always contain only a small number of defendants who possibly are responsible for just one specific injury.[69] A particular defendant's conduct in these cases typically could have caused the injury even if the other defendants had not acted. Moreover, the traditional tort principles of duty and proximate cause apply to limit further a defendant's potential exposure. Thus, the doctrine of alternative liability is highly unlikely to subject an inordinate number of defendants to excessive liability.

The alternative liability theory does not apply in most DES cases because of the large number of potential defendants, which courts and commentators have estimated to be between ninety-four and three hundred manufacturers.[70] To join as defendants all

66. *Id.* at 105.

67. *Id.* at 104.

68. *See* notes 37-39 *supra* and accompanying text.

69. *See, e.g.*, Wetzel v. Eaton, 62 F.R.D. 22 (D. Minn. 1973); Garcia v. Joseph Vince Co., 84 Cal. App. 3d 868, 148 Cal. Rptr. 843 (1978); Petersen v. Parry, 92 Idaho 647, 448 P.2d 653 (1968).

70. Comment, *supra* note 2, at 964 n.3; Ferrigno v. Eli Lilly & Co., 175 N.J. Super.

manufacturers that might have supplied DES to the plaintiff's mother clearly would be impractical in many cases.[71] Plaintiffs in such cases thus are unable to meet the requirements for establishing alternative liability, even though they otherwise might be entitled to receive compensation for their injuries. This practical problem is precisely what led the courts to formulate the market share liability theory.

C. *Market Share Liability*

Both the market share and alternative liability theories operate under at least one common policy, which the *Sindell* court summarized as follows: "[A]s between an innocent plaintiff and negligent defendants, the latter should bear the cost of injury."[72] In creating market share liability, however, the California Supreme Court modified the traditional alternative liability theory and adapted it to DES cases.[73] Under the *Sindell* court's scheme, a plaintiff need only join a sufficient number of manufacturers to represent a "substantial share" of the market.[74] Once the plaintiff has met this threshold requirement, the burden of proof shifts to each defendant to exculpate itself by showing that it could not have supplied the offending drug.[75] Those defendants that are unable to prove their innocence are liable for the plaintiff's damages. The court in *Sindell*, however, recognized that holding each of the five remaining defendants jointly and severally liable for all plaintiff's harm would have been unfair, since only ten of the approximately two hundred manufacturers originally were joined in the action. In view of the large number of manufacturers, the *Sindell* court reasoned that there "may be a substantial likelihood" that none of them supplied the drug which caused plaintiff's harm.[76] To overcome this difficulty, the *Sindell* court held that each defen-

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551, 420 A.2d 1305 (Law Div. 1980) (287 companies marketed DES).

71. Namm v. Charles E. Frosst & Co., 178 N.J. Super. 19, 427 A.2d 1121 (App. Div. 1981); *see* Comment, *supra* note 2, at 991, 996; Note, *supra* note 23, at 1003-06; 38 WASH. & LEE L. REV., *supra* note 50, at 144.

An exceptional case is Abel v. Eli Lilly & Co., 94 Mich. App. 59, 289 N.W.2d 20 (1980). The court in *Abel* held that plaintiff stated a cause of action under alternative liability by alleging that all manufacturers that distributed DES in the jurisdiction in which plaintiff's mother took the drug were joined as defendants. *Id.* at 72, 289 N.W.2d at 25.

72. Sindell v. Abbott Laboratories, 26 Cal. 3d 588, 610-11, 607 P.2d 924, 936, 163 Cal. Rptr. 132, 144, *cert. denied*, 449 U.S. 912 (1980).

73. *Id.* at 598-99, 610, 607 P.2d at 928, 936, 163 Cal. Rptr. at 136, 144.

74. *Id.* at 612, 607 P.2d at 937, 163 Cal. Rptr. at 145.

75. *Id.*

76. *Id.* at 602-03, 607 P.2d at 931, 163 Cal. Rptr. at 138-39.

dant would be liable only for "the proportion of the judgment represented by its share of the market."[77] Underlying the court's reasoning is the notion that although market share liability might not effect a correct matching of plaintiffs and defendants in each case, each defendant ultimately will be held liable only for the amount of harm that it statistically was likely to have caused.[78]

The requirements of market share and alternative liability are closely analogous. The alternative liability theory requires joinder of all possible wrongdoers to ensure that the actual wrongdoer is before the court. Similarly, the market share theory requires the plaintiff to join a sufficient number of defendants to reflect a "substantial share" of the market, which *increases* the likelihood that the responsible party is before the court.[79] Under the latter theory, the damage apportionment rules are changed to compensate for the lack of certainty about whether the plaintiff has joined the true wrongdoer. Both theories, however, shift the burden of proof on the issue of causation to the defendants, and both permit the defendants to exculpate themselves upon a proper showing.

Despite these similarities, the question remains whether the market share liability theory actually can promote the policy that underlies both theories. This policy permits an injured plaintiff to recover from a defendant who was clearly negligent, but whose conduct cannot be directly linked to—or separated from—the plaintiff's injury. An evaluation of the actual success or failure of the market share theory is possible only after careful scrutiny of the rationales upon which the two theories rest, for only then do the incongruent aspects of the separate doctrines surface.

Alternative liability, according to some authorities, is justifiable in part because the defendants in such situations typically are in a better position to offer evidence on the causation issue than is the plaintiff;[80] these authorities, therefore, reason that the defendants should be forced to come forward with their evidence. Manufacturers in DES cases, on the other hand, often are not in a better position than the plaintiff to prove the origin of the drug that the

77. *Id.* at 612, 607 P.2d at 937, 163 Cal. Rptr. at 145.

78. *Id.* at 612-13, 607 P.2d at 937, 163 Cal. Rptr. at 145. A law review comment, which analyzed the DES problem and suggested a novel theory of enterprise liability, greatly influenced the *Sindell* court in its development of market share liability. *See* Comment, *supra* note 2. While the court did not strictly follow every suggestion that the student made, it did adopt many of them.

79. Comment, *supra* note 2, at 996; 11 SETON HALL L. REV. 610, 625 (1981); 20 WASHBURN L.J. 468, 476 & n.60 (1981).

80. *See* note 55 *supra* and accompanying text.

plaintiff's mother consumed, especially since drug companies normally deal only indirectly with consumers and do not know which ones have purchased their products.[81] Although the California Supreme Court in *Sindell* determined that the difference in the two theories on the question of the availability of proof to the defendants was not an appropriate justification for denying imposition of its new theory,[82] other courts since *Sindell* have expressly relied on this distinction to avoid applying market share liability in DES cases.[83]

A related rationale for the alternative liability theory is that the burden of proof should be shifted because the defendants' negligence created the plaintiff's inability to prove causation.[84] The *Sindell* court, however, rejected this argument in the DES context on the ground that defendants could not have foreseen that their negligence in producing a defective product without adequate warnings eventually would present plaintiff with an availability of proof problem.[85] The court reasoned that the principal cause of plaintiff's inability to prove causation was not defendants' negligence, but the time lapse between the mother's consumption of the drug and the appearance of a disorder in her offspring.[86] Thus, two justifications that some authorities give for the alternative liability theory do not provide support for the market share doctrine, even though the latter ostensibly is derived from the former.

The market share liability theory relaxes the plaintiff's burden of proof on the issue of causation to a greater degree than do most alternative liability cases. Thus, the doctrine has greater potential for frustrating the underlying purposes of the causation in fact requirement. It is axiomatic that increasing the number of potential defendants greatly reduces the probability that any given defendant caused the harm.[87] Unlike alternative liability cases in which the probability that a particular defendant caused the plaintiff's

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81. Sindell v. Abbott Laboratories, 26 Cal. 3d 588, 600-01, 607 P.2d 924, 929-30, 163 Cal. Rptr., 132, 137-38, *cert. denied*, 449 U.S. 912 (1980); Namm v. Charles E. Frosst & Co., 178 N.J. Super. 19, 427 A.2d 1121 (App. Div. 1981); Henderson, *supra* note 10, at 147.

82. Sindell v. Abbott Laboratories, 26 Cal. 3d 588, 600, 607 P.2d 924, 929, 163 Cal. Rptr. 132, 137, *cert. denied*, 449 U.S. 912 (1980).

83. Namm v. Charles E. Frosst & Co., 178 N.J. Super. 19, 427 A.2d 1121 (App. Div. 1981).

84. *See* text accompanying notes 58-61 *supra*.

85. Sindell v. Abbott Laboratories, 26 Cal. 3d 588, 601, 607 P.2d 924, 930, 163 Cal. Rptr. 132, 138, *cert. denied*, 449 U.S. 912 (1980).

86. *Id. See also* Namm v. Charles E. Frosst & Co., 178 N.J. Super. 19, 427 A.2d 1121 (App. Div. 1981); Note, *supra* note 23, at 1007-09.

87. Comment, *supra* note 2, at 997.

harm is usually at least one-half or one-third,[88] the likelihood that any given defendant in a market share liability case actually was responsible for the plaintiff's injury may be very slight. With one hundred defendants, the probability that each caused the harm is reduced to one percent.[89] Indeed, market share liability relaxes the burden of proof well beyond this point, since several hundred manufacturers may have produced the product, and any one of them may have caused the harm in a given case. Obviously, this probability remains the same whether the plaintiff joins all DES manufacturers or only five of them.

The market share liability theory can be placed in proper perspective only by analyzing it in light of the relevant purposes that the causation requirement serves. One of these purposes is to limit the scope of potential liability and avoid discouraging socially useful activity.[90] If market share liability operates as the *Sindell* court envisioned that it would, this function of the causation requirement will not be thwarted. The market share doctrine theoretically protects defendants from excessive liability by limiting their potential exposure in proportion to the amount of DES that they sold for the purpose of preventing miscarriage. Presumably, then, no defendant will be held liable for more harm than it actually caused, which is as much protection as the causation in fact requirement can hope to provide.[91] In practice, however, it is questionable whether a defendant can be assured under the market share theory that his potential liability will be so predictably circumscribed. As will be discussed in more detail below,[92] the practical and procedural problems inherent in implementing the doctrine are so great that damages are unlikely to be limited to the amount of harm that the defendant caused.

Another purpose of the causation in fact requirement is to cause courts and juries to impose liability on the basis of moral blame.[93] This purpose is well served under the alternative liability theory because it is a fault-based doctrine; its reliance upon causal blame is not impaired significantly by the relatively modest relaxa-

88. *See* notes 64-67 *supra* and accompanying text.

89. R. EPSTEIN, *supra* note 6, at 156.

90. *See* notes 37-39 *supra* and accompanying text.

91. Moreover, other traditional limitations on liability such as the requirement of a defect and proximate cause apply to DES cases and possibly could cut off liability short of this point.

92. *See* part III *infra*.

93. *See* text accompanying notes 40-43 *supra*.

tion of the proof of causation standard that results when a typically small number of defendants—at least one of whom actually caused the harm to the plaintiff—are held liable for the plaintiff's injury.[94] Under the market share theory, however, the plaintiff may not have even joined the actual wrongdoer.[95] In this situation, which is likely to occur quite frequently, there is less blame to spread among the defendants because any uncertainty that the manufacturer which caused the harm has been joined as a defendant will eliminate causal blame from the equation to the extent of the uncertainty.[96]

The degree to which causal blame is diluted in this manner in market share cases will depend upon the definition that the court gives to the phrase "a substantial share" of the market. If, for example, the court holds that manufacturers representing fifty percent of the DES market constitute "a substantial share," then only fifty percent of the blame—and one-half of the plaintiff's damages—can be attributed to these manufacturers in an action in which they are all joined. Unfortunately, the Supreme Court of California in *Sindell* failed to define the phrase "a substantial share." A law review comment that significantly influenced the court's decision, however, suggested that the plaintiff should be required to join enough manufacturers to create "clear and convincing evidence" that one of the joined defendants manufactured the product which caused the plaintiff's injury.[97] The comment proposed that joinder of seventy-five to eighty percent of the manufacturers in the market would satisfy this standard.[98] The *Sindell* court, however, rejected this figure as too high and held that "only a substantial percentage is required."[99] This statement implies that a lower percentage than seventy-five percent of the market has to be joined to constitute "a substantial share,"[100] though how much less is unclear. In any event, if the percentage of defendants that must be joined is reduced, then the total amount of blame that can be attributed to these defendants is diminished proportionately.

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94. *See* text accompanying notes 40-43 & 58-67 *supra*.

95. Sindell v. Abbott Laboratories, 26 Cal. 3d 588, 603, 607 P.2d 924, 931, 163 Cal. Rptr. 132, 139, *cert. denied*, 449 U.S. 912 (1980).

96. *See, e.g.*, A. BECHT & F. MILLER, *supra* note 61, at 106; Comment, *supra* note 2, at 996-97.

97. Comment, *supra* note 2, at 995.

98. *Id.* at 996.

99. Sindell v. Abbott Laboratories, 26 Cal. 3d 588, 612, 607 P.2d 924, 937, 163 Cal. Rptr. 132, 145, *cert. denied*, 449 U.S. 912 (1980).

100. 59 WASH. U.L.Q. 571, 583 (1981).

The countervailing argument to the one that advocates joinder of a high percentage of manufacturing companies is based on plaintiff's allegation in *Sindell* that only five or six manufacturers represent ninety percent of the DES market.[101] According to this argument, joinder of these manufacturers will ensure that at least ninety percent of the blame which the harmful occurrence generated will be attributable—at least statistically—to the defendants. In this scenario, the argument continues, market share liability will not differ significantly from alternative liability. Even if the allegation can be established, this position is untenable for two principal reasons. First, the market share liability theory does not require that all large manufacturers be joined as defendants; it only requires joinder of a sufficient number of manufacturers to represent "a substantial share" of the market. Second, market share liability apparently is applicable to all products liability cases that deal with fungible goods, not just those in which DES is the allegedly defective product.[102] Few markets in fungible goods, however, will be structured like the DES market. Thus, while the dominance of a few firms may prevent a significant dilution of causal blame in some DES cases, no guarantee exists that it will do so in cases concerning other fungible goods—or even in all DES cases.

Causal blame also is diluted in a second way. Even if the plaintiff were required to join all manufacturers who might possibly have caused the harm, the large number of DES manufacturers reduces the amount of blame attributable to each individual defendant.[103] Causal blame necessarily is proportionate to the degree of certainty that the actor caused the harm. Thus, causal blame is very high in cases in which a defendant unquestionably caused an injury and very low when there is only a slight possibility that the defendant caused the harm. In most general tort cases, a "more likely than not" standard, which usually is sufficient to generate causal blame, is used. In a typical alternative liability case, when there are only two or three defendants, a somewhat lower standard of proof is used; causal blame is attributable to each defendant because of the significant likelihood that each of the defendants caused the harm. In DES cases, however, a possible 300 manufacturers could be joined as defendants. Most of the manufacturers commanded only a small portion of the relevant market. Thus,

101. Sindell v. Abbott Laboratories, 26 Cal. 3d 588, 611-12, 607 P.2d 924, 937, 163 Cal. Rptr. 132, 145, *cert. denied*, 449 U.S. 912 (1980).

102. *See* notes 156-66 *infra* and accompanying text.

103. *See* A. BECHT & F. MILLER, *supra* note 61, at 105; Comment, *supra* note 2, at 996.

only a small chance exists that one of them caused a given plaintiff's harm. Therefore, the amount of causal blame attributable to these manufacturers is quite low. Nonetheless, these manufacturers will be held liable under market share liability if they are joined as defendants.

Causal blame cannot be invoked to justify the imposition of liability against the many defendant manufacturers in DES cases because the probability that a particular defendant caused the harm is too minimal to generate feelings of culpability. If disclosure of the facts engenders sentiments of blame toward such a defendant, that blame must be based on the defendant's failure to take actions such as adequately testing the drug, not on any notions of causation of harm. The defendant's failure to take such actions subjects it to culpability-based blame—blame based solely on antisocial conduct—rather than causal blame.

Plaintiffs in DES cases can argue that causal blame justifies market share liability because even though the blame attributable to a particular defendant may be small, the sum of the blame attributable to all manufacturers—whether or not they are joined as defendants—nevertheless equals one hundred percent; a defendant, therefore, must pay for only the percentage of harm that it statistically could have caused. Under this reasoning, the dilution of causal blame that is attributable to a given defendant is counterbalanced by the corresponding dilution of liability. As will be discussed below, however, this argument incorrectly assumes that the market share liability theory can effectively achieve a fair apportionment of damages based on the defendants' market share.[104]

Of course, the imposition of moral blame may be based partially on the antisocial nature of the defendants' conduct. Although the plaintiffs in market share liability cases can argue effectively that the manufacturers were negligent,[105] the defendants in these cases can make equally good arguments to the contrary,[106] and juries have decided both ways.[107] Even if one assumes negligence on the part of the defendants, however, the defendants still can argue persuasively that they were marketing what they initially thought was a socially desirable product, which only subsequently was dis-

104. *See generally* part III *infra*.

105. Comment, *supra* note 2, at 971 n.25; 94 HARV. L. REV., *supra* note 50, at 669.

106. *See* Sindell v. Abbott Laboratories, 26 Cal. 3d 588, 621, 607 P.2d 924, 942-43, 163 Cal. Rptr. 132, 150-51 (Richardson, J., dissenting), *cert. denied*, 449 U.S. 912 (1980); Note, *supra* note 6, at 723; Note, *supra* note 50, at 312.

107. 94 HARV. L. REV., *supra* noto 50, at 674 n.37.

covered to be defective. Thus, these defendants might argue, their conduct was not sufficiently antisocial[108] to justify relaxing the normal burden of proof requirement concerning causation in fact.

Whether the courts should exercise their power to relax the plaintiff's burden of proof in market share liability cases is essentially a policy question. Market share liability relaxes the plaintiff's burden to a much greater degree than alternative liability; therefore, the risk of over-deterrence is increased for products such as nondefective generic drugs that normally are beneficial. Consequently, the relaxation of the plaintiff's burden of proof under the market share liability theory may not be justified.[109] Since damages under the market share theory are apportioned according to each defendant's share of the market, a major argument in favor of relaxing the plaintiff's burden is that the defendant's liability exposure is also reduced. Whether the defendant's liability exposure actually can be reduced as a practical matter is considered in part III of this Article.

III. Practical and Procedural Impediments to the Apportionment of Damages Under the Market Share Liability Theory

A primary justification which is typically given for market share liability is that all defendants are treated equitably under the theory, since liability is apportioned according to each defendant's share of the market.[110] The true test of the theory's effectiveness, however, is whether this apportionment can be implemented as a practical matter. This part of the Article maintains that a number of practical and procedural difficulties render it unlikely that the doctrine can accurately apportion damages based on an approximation of each defendant's share of the market.

A. Divergent Views on the Definition of the "Relevant Market" and Lack of Uniformity Among the Courts

What constitutes the relevant market for the purpose of determining a particular defendant's market share can affect significantly the percentage of liability that is attributable to a given defendant. Suppose, for example, that plaintiff's mother purchased all her DES from one Illinois pharmacy, which filled its DES pre-

108. Malone, *supra* note 40, at 84; Note, *supra* note 6, at 723.
109. *See generally* part IV *infra*.
110. Comment, *supra* note 2, at 999; 11 Seton Hall L. Rev., *supra* note 79, at 623.

scriptions exclusively from five manufacturers. Suppose also that the pharmacist cannot recall which brand of DES he used to fill the mother's prescription. Finally, assume that defendant *X*, one of the pharmacy's five providers, supplied thirty percent of the DES marketed in Illinois, but only ten percent of the DES sold nationally. Defendant *X*'s market share, therefore, will be either ten percent, twenty percent,[111] or thirty percent, depending upon whether the relevant market is defined on a national, local (pharmacy-level), or statewide basis.

A major weakness of the *Sindell* decision is the court's failure to indicate how the relevant market should be defined.[112] On the one hand, the court could have intended that different definitions should apply to different cases; on the other hand, it might have contemplated that a uniform rule should apply to all cases. Thus, in the absence of any direct guidance from the courts, the proper analytical approach is to determine which definition is the most appropriate for market share liability cases. In the example above, the local market (pharmacy-level) is the most appealing standard because it most closely approaches the probability that each defendant supplied the offending drug.[113] Unfortunately, in many cases evidence of the local market share will not be available because the pharmacists have failed to keep sufficiently detailed records in their files for extended periods of time. If this evidence were unavailable, then the court would be forced either to dismiss the plaintiff's cause of action or to resort to another definition of the relevant market. If the court chose the latter option, the new definition of the relevant market again would have to depend at least in part on the type and quantity of available information. If the court's definition of the relevant market varies from case to case according to the proof available, then the inevitably conflicting decisions are certain to yield inconsistent results. This difference in results would transform the market share liability theory into a lottery based on the fortuity of the availability of evidence in a particular case. If a defendant's proportionate share of the liability is permitted to vary widely from one case to another solely because

111. This result assumes that each of the five manufacturers sold equal amounts of DES to the pharmacist. Thus, each manufacturer would have a 20% share of the market that the pharmacy served.

112. Birnbaum, *Market Share Liability Under California's Sindell DES Decision*, NAT'L L.J., May 19, 1980, 26 col. 1, 27 col. 1; *see* 11 SETON HALL L. REV., *supra* note 79, at 622.

113. 11 SETON HALL L. REV., *supra* note 79, at 622.

of the amount of proof on hand, then the market share theory's ultimate goal of apportioning liability fairly according to each defendant's market share will be unattainable.

A better approach to this problem is to formulate a single definition of the relevant market and apply it uniformly in all cases. This approach, however, can succeed only if a broad definition—such as a national or statewide market—is formulated. If a more specific definition were used, plaintiffs in many cases would be hard pressed to present sufficient proof to satisfy this standard. A general definition that is uniformly applied is far more likely to result ultimately in a fair apportionment of damages.

Even if courts were to apply a broad, uniform definition of the relevant market, another element of the market share theory could seriously impair the court's efforts to impose liability on defendants in an equitable manner. According to the court in *Sindell*, a defendant can escape liability entirely by showing that it could not have produced the DES which caused the plaintiff's harm. This element also is certain to result in inconsistent determinations of a given defendant's proportionate liability. Assume that two cases arise in a jurisdiction that applies a uniform definition of relevant market, and that the same twenty manufacturers are joined as defendants in both cases. In the first case, the evidence shows that the DES came from one of five defendants; in the second case no such exculpatory evidence exists. In the first case, under the market share liability theory, the action against fifteen defendants must be dismissed, and the remaining five defendants must pay all the plaintiff's damages.[114] In the second case, all twenty defendants will have to pay their full market share under the normal definition of relevant market. The combination of the two cases will result in the five defendants paying more than their market share—according to the uniform definition—and the fifteen paying less than their market share.[115] In other words, in the first case the five defendants paid more than their market share, while in the second case they paid their full market share. Likewise, the other fifteen defendants paid their full market share in the second case but paid nothing in the first. Moreover, because of factors such as time lapses the presence of exculpatory evidence is largely fortuitous. The net result is that defendants' liability in DES cases will

114. Sindell v. Abbott Laboratories, 26 Cal. 3d 588, 612, 607 P.2d 924, 937, 163 Cal. Rptr. 132, 145, *cert. denied*, 449 U.S. 912 (1980).

115. 94 HARV. L. REV., *supra* note 50, at 675-76.

fluctuate according to the availability of proof rather than the culpability of their conduct.

B. *The Requirement That the Defendants Pay the Entire Judgment*

Although the court in *Sindell* was unclear on this point, the decision arguably requires that defendants pay one hundred percent of the plaintiff's damages even though these defendants may represent less than one hundred percent of the market, a requirement which inherently distorts the defendants' actual liability. The court in *Sindell* stated, "Each defendant will be held liable for the proportion of the judgment represented by its share of that market unless it demonstrates that it could not have made the product which caused plaintiff's injuries."[116] This language can be interpreted in two ways. On the one hand, the language can be construed to mean that if the plaintiff joins manufacturers representing sixty percent of the market, she will only recover sixty percent of her damages.[117] On the other hand, the statement could mean that the defendants must pay one hundred percent of the judgment, but that their liability will be apportioned according to their relative share of the market.[118] The latter interpretation appears to articulate the rule that the court in *Sindell* intended to adopt.[119] The majority opinion stated that once plaintiff met her burden of joining "a substantial share" of the relevant market, defendants could file a cross-complaint[120] against other DES manufacturers that may have supplied the defective product. This statement implies that the court intended the joined defendants to be

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116. Sindell v. Abbott Laboratories, 26 Cal. 3d 588, 612, 607 P.2d 924, 937, 163 Cal. Rptr. 132, 145, *cert. denied*, 449 U.S. 912 (1980).

117. Note, *supra* note 6, at 721.

118. *Id.*

119. Note, *Market Share Liability: A New Method of Recovery for D.E.S. Litigants*, 30 CATH. U.L. REV. 551, 574 (1981); Note, *supra* note 6, at 721; 11 SETON HALL L. REV., *supra* note 79, at 621.

120. In California a cross-complaint can operate as an impleader. CAL. CIV. PROC. CODE § 428.10(b) (West 1973). Section 428.10(b) provides in pertinent part,

> A party against whom a cause of action has been asserted in a complaint or cross-complaint may file a cross-complaint setting forth. . . :
>
> . . . .
>
> (b) Any cause of action he has against a person alleged to be liable thereon, whether or not such person is already a party to the action, if the cause of action asserted in his cross-complaint (1) arises out of the same transaction, occurrence, or series of transactions or occurrences as the cause brought against him or (2) asserts a claim, right, or interest in the property or controversy which is the subject of the cause brought against him.

held liable for one hundred percent of the damages, since defendants have no apparent reason to cross-complain against third parties except to seek contribution; a right to contribution exists only in cases in which the joined defendants may be held liable for more than their pro rata share of the judgment.[121] In addition, the dissenting judge in *Sindell* interpreted the majority opinion to require defendants to pay the entire amount of the damages. The majority did not disavow this interpretation, although it did comment on other aspects of the dissent.[122]

The inherent distortion of defendants' actual liability under the market share liability theory is best illustrated by a hypothetical. Assume that plaintiff's damages are $100,000, and she joins enough DES manufacturers to represent sixty percent of the relevant market. Defendant *X* occupies twenty percent of the relevant market and one-third of the market that all joined defendants represent. If each defendant is liable only for the percentage of the judgment that is equivalent to its share of the relevant market, then defendant *X* would be liable for twenty percent of the damages, or $20,000.[123] If defendants are required to pay one hundred percent of the judgment, however, then defendant *X* must pay one-third of the judgment, or $33,333, which is equivalent to one-third of the market that all the joined defendants represent.[124] In other words, defendant *X* would have to pay sixty-seven percent ($13,333) more than its share of the relevant market.

Plaintiffs can respond to the distortion argument by contending that defendants are free to bring in third party defendants by cross-complaint if they wish to have a larger market share represented in the suit.[125] The problem with this response is that many manufacturers may not be amenable to suit in the jurisdiction where the plaintiff brings the action.[126] For example, some DES manufacturers intentionally catered to local and regional mar-

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121. *See, e.g.*, E.B. Willis Co. v. Superior Court, 56 Cal. App. 3d 650, 128 Cal. Rptr. 541 (1976).

122. Sindell v. Abbott Laboratories, 26 Cal. 3d 588, 613 n.30, 607 P.2d 924, 938 n.30, 163 Cal. Rptr. 132, 146 n. 30, (Richardson, J., dissenting), *cert. denied*, 449 U.S. 912 (1980).

123. *See* 11 SETON HALL L. REV., *supra* note 79, at 624.

124. *Id.*

125. Sindell v. Abbott Laboratories, 26 Cal. 3d 588, 612, 607 P.2d 924, 937, 163 Cal. Rptr. 132, 145, *cert. denied*, 449 U.S. 912 (1980).

126. Note, *supra* note 6, at 721-22; 59 WASH. U.L.Q., *supra* note 101, at 583; 38 WASH. & LEE L. REV., *supra* note 50, at 141-42. Market share liability does not require that the plaintiff be injured in California in order to bring suit in California. In fact, one plaintiff in *Sindell* was from Florida, and the other was from Illinois. *See* Note, *supra* note 6, at 721.

kets.[127] Therefore, a manufacturer who produced a high percentage of the DES used in the locality where the plaintiff's mother obtained the drug may not do business in the jurisdiction where suit is filed.[128] Nevertheless, the plaintiff still will be able to recover one hundred percent of her damages from the defendants subject to suit in that jurisdiction as long as they represent "a substantial share" of the market that is applicable to her.

Clearly, then, the court's definition of a substantial market share will directly affect the degree to which the defendants' liability is distorted. The lower the percentage of the market that is required to be joined, the higher will be the resulting distortion.[129] In the example above, defendant *X*, who represented twenty percent of the market, would have to pay one-third of the judgment if the court required that defendants representing at least sixty percent of the market must be joined. If only enough defendants to represent forty percent of the market must be joined, however, then a defendant with twenty percent of the market share would have to pay fifty percent of the damages. On the other hand, if the court requires that defendants representing seventy-five percent of the market share must be joined, then the defendant would have to pay only twenty-seven percent of the judgment. Thus, the degree of distortion is directly proportional to the percentage of the market that is required to be joined. The California courts have yet to provide a figure for future courts to use in deciding what constitutes "a substantial share," and it remains unclear whether courts will adopt a uniform measure or permit the trial courts to use their own definitions on an ad hoc basis.[130]

C. Limited Acceptance of the Doctrine

The market share liability theory has not been well received by courts in other states. In fact, some recent DES cases have expressly refused to adopt the doctrine.[131] If the theory continues to be accepted on a limited basis, further distortions will result. If only a few states accept it, then liability will fall unevenly upon the manufacturers that are amenable to suit in those states.[132] Since

127. R. EPSTEIN, *supra* note 6, at 159.

128. *See* Note, *supra* note 6, at 721.

129. 11 SETON HALL L. REV., *supra* note 79, at 624.

130. *Id.* at 621.

131. Ryan v. Eli Lilly & Co., 514 F. Supp. 1004 (D.S.C. 1981); Namm v. Charles E. Frosst & Co., 178 N.J. Super. 19, 427 A.2d 1121 (App. Div. 1981).

132. Sindell v. Abbott Laboratories, 26 Cal. 3d 588, 617, 607 P.2d 924, 940, 163 Cal.

the doctrine appears to require that the joined defendants pay one hundred percent of the plaintiff's damages regardless of whether these defendants collectively represent one hundred percent of the market,[133] those manufacturers who are subject to jurisdiction in California, for example, will have to pay the entire amount of the plaintiff's damages—even though in some of the cases manufacturers who are not amenable to suit may have caused the harm.

D. Problems of Proof

The possibility that sufficient evidence will be available to present a complete and accurate picture of the relative market share of all DES manufacturers may be nonexistent in many cases.[134] Many manufacturers may not have kept accurate records, and the time lapse between the marketing of the drug and the bringing of the action exacerbates this problem.[135] Moreover, many of the records that at one time did exist may have been lost or destroyed by the time the lawsuit was filed. Furthermore, since DES was marketed for a variety of uses,[136] raw production figures—even if available—may not reflect accurately the amount of DES that was produced for the purpose of preventing miscarriage.

The large number of DES manufacturers also contributes to the availability of proof problem. A given defendant's market share can be ascertained only by comparing the amount of DES that it produced for the purpose of preventing miscarriage with the total amount of DES that all other manufacturers produced for the same purpose. Under normal circumstances, neither of these statistics would be readily available or easy to gather. To complicate matters, the number of manufacturers who produced DES for the purpose of preventing miscarriage also may be unclear.[137] Even if

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Rptr. 132, 148 (Richardson, J., dissenting), *cert. denied*, 449 U.S. 912 (1980). Birnbaum, *supra* note 112, at 27; 11 SETON HALL L. REV., *supra* note 79, at 621.

133. *See* notes 116-30 *supra* and accompanying text.

134. Sindell v. Abbott Laboratories, 26 Cal. 3d 588, 612-13, 607 P.2d 924, 937, 163 Cal. Rptr. 132, 145, *cert. denied*, 449 U.S. 912 (1980); R. EPSTEIN, *supra* note 6, at 159.

135. Sindell v. Abbott Laboratories, 26 Cal. 3d 588, 612-13, 607 P.2d 924, 937, 163 Cal. Rptr. 132, 145, *cert. denied*, 449 U.S. 912 (1980); 11 SETON HALL L. REV., *supra* note 79, at 622.

136. Sindell v. Abbott Laboratories, 26 Cal. 3d 588, 612-13, 607 P.2d 924, 937, 163 Cal. Rptr. 132, 145, *cert. denied*, 449 U.S. 912 (1980); Namm v. Charles E. Frosst & Co., 178 N.J. Super. 19, 427 A.2d 1121 (App. Div. 1981); R. EPSTEIN, *supra* note 6, at 159; Note, *supra* note 119, at 556.

137. Comment, *supra* note 2, at 964 n.3. Estimates range from 94 to 300. *Id. Sindell* states that approximately 200 manufacturers produced DES. Sindell v. Abbott Laboratories, 26 Cal. 3d 588, 602, 609, 607 P.2d 924, 931, 935, 163 Cal. Rptr. 132, 139, 143, *cert. denied*,

they could all be identified, some of these manufacturers may have either inadequate records or no records at all. Others may have gone out of business, and their records may have been destroyed.[138] Furthermore, even if raw production data for all other companies were available, coordinating the data with the definition of the "relevant market" would be very difficult, since some manufacturers may have catered to national markets and others may have pursued regional ones,[139] not to mention that these markets may have shifted over time as circumstances changed.[140]

The *Sindell* court implied that a plaintiff operates under a relaxed standard of proof in establishing a defendant's market share. Thus, even in cases in which inadequate evidence is available, the plaintiff nevertheless will be permitted to recover. The court, however, did not articulate the extent to which it was willing to relax the standard of proof. It acknowledged the impossibility of proving the defendant's market share with "mathematical exactitude,"[141] but it concluded that this difficulty does not justify an outright rejection of market share liability.[142] Quoting from the *Summers* opinion, the court stated that " 'the trier of fact may make [the determination] the best it can.' "[143] The California Supreme Court in *Summers* explained this phrase by pointing out that the factfinder's decision is "more or less a guess, [which stresses] the factor that wrongdoers are not in a position to complain of uncertainty."[144] This language provides some indication that the *Sindell* court intended to relax the normal standard of proof considerably, which, in the absence of adequate evidence, would allow the jury to determine a defendant's market share by resorting to speculation. The validity of this interpretation, however, remains to be seen. Certainly, the plaintiff must produce some evidence of the defendant's market share, but how much evidence is not clear.

Relaxing the burden of proof on the market share issue and requiring the defendants to exculpate themselves will cause serious problems in those cases in which some of the relevant evidence is

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449 U.S. 912 (1980). Some estimates may be larger than others because they include distributors of DES that other companies manufactured. Comment, *supra* note 2, at 964 n.3.

138. Note, *supra* note 50, at 308.

139. R. EPSTEIN, *supra* note 6, at 159.

140. *Id.*

141. Sindell v. Abbott Laboratories, 26 Cal. 3d 588, 613, 607 P.2d 924, 937, 163 Cal. Rptr. 132, 145, *cert. denied*, 449 U.S. 912 (1980).

142. *Id.*

143. *Id.* (quoting Summers v. Tice, 33 Cal. 2d 80, 88, 199 P.2d 1, 5 (1948)).

144. Summers v. Tice, 33 Cal. 2d 80, 88, 199 P.2d 1, 5 (1948).

more readily available to the plaintiff than to the defendants. In this situation a plaintiff—knowing that she is operating under a relaxed burden of proof—will often lack the incentive to develop or produce certain evidence. Moreover, since wholesalers and retailers over whom DES manufacturers had no control[145] marketed DES as a generic drug,[146] the manufacturers often will be unable to determine whether the DES that they produced was the DES which was actually prescribed to and consumed by the plaintiff's mother. On the other hand, the plaintiff's mother might have information that is relevant—for example, the place where the prescription was filled or the size and color of the DES tablets that she consumed.

The plaintiff in some situations actually may have an incentive to suppress probative evidence. If the manufacturer that caused the harm is insolvent, for example, a plaintiff who can establish that the manufacturer sold the DES to her mother will be in a worse position than a plaintiff who cannot. The plaintiff who can prove the wrongdoer's identity would recover nothing,[147] while the plaintiff who fails to present any proof would recover all her damages from the joined defendants under the market share liability theory. This anomaly provides a plaintiff with an incentive to suppress evidence which indicates that an insolvent company supplied the product.[148] In fact, the plaintiff may have no motivation to do anything other than present very minimal evidence on the market share issue and allow the burden to shift to the defendants to absolve themselves. If a defendant cannot meet its burden—either because the evidence does not exist or is not made available—the case will be sent to the jury, and the jury will apportion damages "the best it can."[149]

IV. Effect of Market Share Liability on the Law of Products Liability: A Policy Analysis

Since market share liability applies in a products liability context, the doctrine should be analyzed according to its success in furthering the three basic goals that underlie modern products liability law. The first of these goals is risk spreading, which provides

145. *See* authorities cited note 81 *supra*.

146. 4 Am. J. Trial Advocacy, *supra* note 18, at 493.

147. Note, *supra* note 23, at 1010; 94 Harv. L. Rev., *supra* note 50, at 676; 11 Seton Hall L. Rev., *supra* note 79, at 620-21.

148. 11 Seton Hall L. Rev., *supra* note 79, at 621.

149. Sindell v. Ahbott Laboratories, 26 Cal. 3d 588, 613, 607 P.2d 924, 937, 163 Cal. Rptr. 132, 145, *cert. denied*, 449 U.S. 912 (1980).

compensation to accident victims by shifting losses to product manufacturers who pass their costs on to the public in the form of price increases.[150] The second goal is deterrence; it aims to provide manufacturers with a financial incentive to improve the safety of their products. This objective can be attained only if the cost of reducing accidents is less than the cost of paying for the harm that the product caused.[151] The *Sindell* court specifically mentioned these two ends of products liability law as justifications for the market share liability theory.[152] The goals favor the plaintiff because they almost always point toward the imposition of liability; the plaintiff will be favored even in the absence of adequate proof of negligence, a defect, or causation in fact.[153]

The last goal of products liability law, which is not discussed as frequently as the first two, is to protect manufacturers from liability that is unduly burdensome.[154] Thus, products liability law contains rules that require proof of a defect and causation to further the policy of protecting potential defendants. This goal often conflicts with the two objectives discussed above because it usually indicates that liability should not be imposed. The standard of living and quality of life in this country has improved significantly over the past one hundred years, in large part because of the use of dangerous machinery and drugs. A system that imposes excessive liability on the manufacturers of these products will inhibit their production and diminish their availability to an undesirable extent. For example, to impose liability on all automobile manufacturers for all the harm that their automobiles cause—even in the absence of a defect—would be consistent with the policies of risk spreading and deterrence. Courts, however, refrain from imposing such excessive liability because the effect on the industry would be devastating.

Courts in products liability cases are faced with the problem of achieving an appropriate balance between the competing goals of products liability law. On the one hand, the law ought to pro-

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150. Holford, *The Limits of Strict Liability for Product Design and Manufacture*, 52 TEX. L. REV. 81, 82-84, 87-88 (1973); Keeton, *Product Liability and the Meaning of Defect*, 5 ST. MARY'S L.J., 30, 34-35 (1973); Wade, *On the Nature of Strict Liability for Products*, 44 MISS. L.J. 825, 826 (1973).

151. Holford, *supra* note 150, at 82-84, 87-88 (1973); Wade, *supra* note 150, at 826.

152. Sindell v. Abbott Laboratories, 26 Cal. 3d 588, 611, 607 P.2d 924, 936, 163 Cal. Rptr. 132, 144, *cert. denied*, 449 U.S. 912 (1980).

153. *See generally* notes 35-36 *supra* and accompanying text.

154. *See* W. PROSSER, *supra* note 37, at 22; Henderson, *supra* note 10, at 691; Note, *supra* note 50, at 310-11; 94 HARV. L. REV., *supra* note 50, at 674-75.

vide manufacturers with a sufficiently strong incentive to produce safe products. On the other hand, the incentive must not be so strong that it unduly inhibits the development and marketing of nondefective products that are useful but dangerous. As stated above, one of the purposes that the causation in fact requirement serves is to protect defendants from excessive liability. The market share liability theory, however, relaxes traditional rules of causation considerably, which increases the liability exposure of defendants. The question inevitably arises, therefore, whether market share liability strikes an appropriate balance between the competing policy considerations underlying products liability law.

One of the first considerations that emerges when considering this question is the effect that the theory will have on the marketing of products other than DES. Over-deterrence is not a problem with DES because the government has disapproved the use of the drug for preventing miscarriages.[155] The market share theory, however, conceivably could apply to all potentially harmful fungible products made from an identical formula.[156] Therefore, the theory could encompass the manufacturing and marketing of cigarettes,[157] food additives,[158] generic drugs,[159] asbestos,[160] pesticides,[161] aluminum wire,[162] industrial waste,[163] and products that cause environmental pollution.[164] Obviously, the potential liability to the producers of these products and other fungible goods is enormous. Thus, to avoid over-deterrence, the producers must receive from the courts some guarantee that their liability will be limited even under the market share theory.

The application of the market share liability theory probably is limited to fungible goods. At the very least, the language in the *Sindell* opinion would seem to indicate that the California court

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155. Comment, *supra* note 2, at 965-66.

156. Sindell v. Abbott Laboratories, 26 Cal. 3d 588, 610, 607 P.2d 924, 936, 163 Cal. Rptr. 132, 144, *cert. denied*, 449 U.S. 912 (1980); Birnbaum, *supra* note 112, at 27, col. 2; Annot., 51 A.L.R.3d 1344 (1973).

157. Note, *supra* note 23, at 1002; Note, *supra* note 50, at 301 n.81.

158. Note, *supra* note 23, at 1002; Note, *supra* note 50, at 301 n.82.

159. Note, *supra* note 23, at 1002; Note, *supra* note 50, at 301 n.82.

160. Comment, *supra* note 2, at 974 n.36; Note, *Industry-Wide Liability and Market Share Allocation of Damages* 15 GA. L. REV. 423, 425 n.10 (1981); Note, *supra* note 50, at 301 n.82; 49 U. CIN. L. REV. 926, 934 n.63 (1980).

161. Comment, *supra* note 2, at 974-75 n.36; Note, *supra* note 50, at 301 n.82.

162. 49 U. CIN. L. REV., *supra* note 160, at 934 n.63.

163. Note, *supra* note 23, at 1002.

164. *Id.* at 1002; Note, *supra* note 160, at 475; Note, *supra* note 50, at 301 n.82.

contemplated such a limitation.[165] The theory cannot be applied in cases in which quality control standards differ within the industry, since under these circumstances, some manufacturers will produce safer products than others.[166] The imposition of liability in this situation actually could reduce a manufacturer's incentive to produce safer products. If a manufacturer realizes that it will be held liable for a portion of the harm that preventable manufacturing defects cause regardless of the amount of care that it takes in the production of its products, then the manufacturer will have little financial incentive to implement effective quality control techniques. Conceivably, if the specter of liability is sufficiently high, the manufacturer might decide to cease production altogether. Aside from this extreme situation, the manufacturer will have an incentive to use quality control techniques only if its share of the market is so large that its failure to use them would create liability in excess of the cost of the quality control measures. Thus, market share liability—if it is imposed at all—should be limited to fungible goods.

Market share liability clearly should not apply, however, to fungible goods cases in which the manufactured product contains a manufacturing defect rather than a design defect.[167] A manufacturing defect occurs when a particular product differs from others in the line because it contains a unique condition that the manufacturer did not intend—for example, when one dose of a vaccine contains an impurity that injures a consumer. A design defect, on the other hand, occurs when an entire line of products is defective because the design or composition of the product presents an unacceptable risk. By increasing quality control standards, a manufacturer normally can reduce the number of manufacturing defects in its products. Thus, the application of market share liability to manufacturing defect cases would be a mistake[168] because it would reduce substantially the safety incentive rationale underlying products liability law.

Market share liability will provide an incentive to promote safety[169] as long as it applies only to fungible products with design

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165. Sindell v. Abbott Laboratories, 26 Cal. 3d 588, 610, 607 P.2d 924, 936, 163 Cal. Rptr. 132, 144, *cert. denied*, 449 U.S. 912 (1980).

166. Davis v. Yearwood, 612 S.W.2d 917 (Tenn. App. 1980); R. EPSTEIN, *supra* note 6, at 158; *Symposium on Products Liability*, 57 MARQ. L. REV. 675, 686 (1974); 94 HARV. L. REV., *supra* note 50, at 677.

167. R. EPSTEIN, *supra* note 6, at 158; *Symposium on Products Liability*, *supra* note 166, at 686; 94 HARV. L. REV., *supra* note 50, at 678.

168. *Symposium on Products Liability*, *supra* note 166, at 686.

169. Comment, *supra* note 2, at 1004-05; 38 WASH. & LEE L. REV., *supra* note 50, at

defects.[170] Some writers, however, contend that the safety incentive is too great, and that the market share doctrine will discourage the development of valuable new products because manufacturers will fear excessive liahility for injuries resulting from products with design defects.[171] Two consequences of market share liability create the possibility that this form of over-deterrence will result from the application of the doctrine. The first consequence is that the theory dramatically increases the liability exposure of manufacturers of fungible goods by relaxing the traditional proof requirements on the issue of causation. Damages in DES cases alone are estimated in the billions of dollars,[172] and equally large sums could be at risk in cases concerning other fungible goods such as asbestos, hazardous wastes, and similar generic drugs to be marketed in the future. Of course, as between the innocent victim and the manufacturer who caused the harm, it is fair to shift the loss to the latter even if the manufacturer is equally innocent.[173] While compensation might be desirable in these cases, over-deterrence could result if the manufacturer perceives this additional cost to be greater than it feasibly can transfer to the consumers of its products. Under these circumstances, the manufacturer might decide against marketing the product at all, which—if the product is worthwhile—will thwart the goal of not discouraging socially desirable activity. Moreover, the doctrine could result in the suppression of useful products that are entirely harmless. Manufacturers often must base their decisions upon incomplete information. If a product presents a risk of causing an unknown harm in the distant future, the market share liability theory may induce the manufacturer to withhold the product from the market, notwithstanding that the product ultimately might prove to be entirely harmless.

The fear of over-deterrence is particularly significant in California, where a manufacturer's liability exposure was higher than in most states even before the development of market share liability. In *Barker v. Lull Engineering Co.*[174] the California Supreme Court adopted a very liberal test for what constitutes a defect in

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170. *See* notes 165-68 *supra* and accompanying text.

171. Note, *supra* note 160, at 436-38; Note, *supra* note 50, at 311.

172. *See generally* text accompanying notes 10-16 *supra*.

173. *See, e.g.*, Sullivan v. Gulf States Utils. Co., 382 So. 2d 184, 189 (La. App.) ("[O]ut of two innocent parties, the owner or guardian of a thing should pay for any damage caused by that thing."), *cert. denied*, 384 So. 2d 447 (La. 1980).

174. 20 Cal. 3d 413, 573 P.2d 443, 143 Cal. Rptr. 225 (1978).

design defect cases. The court held that a product would be considered defective in design if it either frustrates consumer expectations or is unreasonably dangerous in hindsight—applying the state of the art at the time of trial rather than at the time of manufacture.[175] Other courts had used both of these tests for some time, but *Barker* increased the defendant's potential liability exposure by applying the tests in the disjunctive. Under the *Barker* test, the consumer expectations test presumably could impose liability in some cases in which the unreasonably dangerous test would not, and vice versa.[176]

DES probably is defective under both prongs of the *Barker* defect test,[177] regardless of whether the plaintiff is able to establish negligence. In addition, *Barker* shifts the burden of proof to the defendant to establish that the design was not unreasonably dangerous in situations in which the plaintiff has shown that the design of the product was a proximate cause of his injury.[178] By shifting the burden of proof, *Barker* ensures that the plaintiff will be more likely to prevail in borderline cases. Combining the relaxed rules of causation under the market share liability theory with the liberalized defect rules in *Barker* will increase a defendant's potential liability in California well beyond that which is possible in other states.[179]

Whether *Barker*'s relaxed standard for proving a defect applies in market share liability cases, or whether plaintiffs instead must prove that the defendant manufacturers were negligent, is unclear. Some of the language in *Sindell* refers to the negligence of defendants,[180] which gives rise to the implication that negligence may be required in all market share liability cases. If negligence is required, then the defendants' liability exposure would be restricted substantially. The *Sindell* court, however, did not discuss the duty question,[181] even though plaintiff in *Sindell* alleged that

175. *Id.* at 435, 573 P.2d at 457-58, 143 Cal. Rptr. at 239-40.

176. For an in-depth comparison of these two defect tests, see Fischer, *Products Liability—Functionally Imposed Strict Liability*, 32 OKLA. L. REV. 93, 96-110 (1979).

177. Note, *supra* note 10, at 681-84.

178. Barker v. Lull Eng'r Co., 20 Cal. 3d at 435, 573 P.2d at 457-58, 143 Cal. Rptr. at 239-40. For a discussion of the burden of proof rule in products liability cases, see Schwartz, *Foreword: Understanding Products Liability*, 67 CALIF. L. REV. 435, 464-72 (1979).

179. Note, *supra* note 10, at 681-84; 11 SETON HALL L. REV., *supra* note 79, at 626.

180. Sindell v. Abbott Laboratories, 26 Cal. 3d 588, 610-11, 607 P.2d 924, 936, 163 Cal. Rptr. 132, 144, *cert. denied*, 449 U.S. 912 (1980).

181. 20 WASHBURN L.J., *supra* note 79, at 477.

defendants were negligent.[182] Moreover, as discussed previously, market share liability is derived from alternative liability, and the version of alternative liability that is embodied in the *Restatement* applies the theory to strict liability cases as well as to negligence cases.[183] In addition, the law review comment that influenced the court in *Sindell* applies its version of the market share theory to both negligence and strict liability actions.[184] Nevertheless, to the extent that negligence is required for the application of the market share theory, the liability exposure for potential defendants will be reduced significantly.

Although the court in *Sindell* did not specify whether the market share theory would apply only to cases in which a manufacturer is negligent, some authority exists for the proposition that courts in any event will impose a negligence requirement only in those market share liability cases that deal with drugs.[185] Some court decisions, including several pre-*Barker* California cases, have applied a negligence standard rather than a strict liability standard in determining the reasonableness of design or warning defects to pharmaceutical products.[186] Thus, since the *Barker* decision dealt with defective machinery, its holding might not apply to drug cases. Under this reasoning, the *Barker* defect standard arguably applies in all market share liability cases except those concerning drugs. Whether negligence is required in all market share liability cases, in no market share liability cases, or only in cases that deal with drugs is unresolved. To the extent that negligence is not required, however, the result will be a liability exposure that is substantially higher than normal, which in turn may be a real impediment to the marketing of new and potentially beneficial products.

The market share liability theory also creates the possibility of over-deterrence in a more serious way because the theory creates the very real possibility that a defendant will be held liable for more harm than it actually caused. The analysis in part III of this Article examined numerous practical and theoretical difficulties that make the theory unlikely to be able to apportion damages in proportion to the amount of harm caused. Indeed, some manufac-

182. Sindell v. Abbott Laboratories, 26 Cal. 3d 588, 594-95, 607 P.2d 924, 925-26, 163 Cal. Rptr. 132, 133-34, *cert. denied*, 449 U.S. 912 (1980).

183. *See* text accompanying notes 51-53 *supra*.

184. Comment, *supra* note 2, at 995.

185. *See id.* at 967 & n.18; Note, *supra* note 10, at 684-88; 94 HARV. L. REV., *supra* note 50, at 669 & n.12.

186. Note, *supra* note 10, at 685-87.

turers probably will be held liable for a disproportionate share of the damages, and among these defendants, damages probably will not be apportioned accurately according to each one's actual market share. Moreover, the prospect of excessive liability can inhibit cautious manufacturers from entering the marketplace.

A second consequence of the market share liability theory that could result in over-deterrence is the enormous litigation costs which are associated with the theory.[187] In DES cases, for example, a plaintiff is free to bring her action against as many as three hundred individual defendants. In addition, because the defendants have conflicting interests in the question of their relative market shares, each defendant must retain its own counsel. Discovery will be enormously time consuming and expensive even if the plaintiff joins only a few manufacturers as defendants, since large numbers of manufacturers and distributors of the drug must be involved in the discovery process to allow for a thorough examination of the issues of market share and exculpation. Furthermore, if multiple plaintiffs bring the action, the litigation could be very protracted, especially if different definitions of the relevant market are used for different plaintiffs. The legal fees and administrative costs arising from litigation of this magnitude easily could rival the cost of the plaintiff's judgment.

In sum, the risk of over-deterrence in market share liability cases is extremely high. Unfortunately, the theory fails to differentiate between cases in which risk spreading is both feasible and desirable and cases in which it is not. Rather, the doctrine applies uniformly without making allowance for policy considerations such as the seriousness of the harm or the plaintiff's need for compensation. Manufacturers, therefore, are justified in fearing that their potential liability costs will be too excessive to risk producing the product in question. The DES cases provide a ready illustration. DES allegedly has caused a serious form of cancer in a relatively small number of cases, and it has caused adenosis in a large number of cases.[188] Risk spreading may be very desirable in the cancer cases, since they are relatively few in number and can result in substantial pecuniary damage in the form of lost wages and medical expenses that the victim may not be able to afford. Risk spreading in the adenosis cases, however, may not be either as feasible or as necessary as in the cancer cases. Some recent medical

187. R. EPSTEIN, *supra* note 6, at 157, 160.
188. *See* notes 2-16 *supra* and accompanying text.

evidence indicates that adenosis is not a precancerous condition but a harmless illness that often disappears spontaneously.[189] If adenosis is not precancerous, a large portion of the damages alleged in these cases may be for psychological harm. Mental suffering of this nature, however, cannot be measured accurately in monetary terms because no marketplace exists for this suffering that can serve as a guideline for courts to follow.[190] Damages for mental suffering, when awarded by a sympathetic jury, may be too large to justify spreading them among the manufacturers. Moreover, the large number of adenosis cases also may make the spreading of these damages infeasible. In addition, loss spreading may not be as useful in adenosis cases as it is in cancer cases because money damages may not be as adequate a remedy for mental suffering as it is for other types of harm.[191] The failure of the market share liability theory to make the distinction between those cases in which risk spreading is appropriate and those in which it is not greatly enhances the potential for excessive liability.

V. CONCLUSION

The market share liability theory has substantial superficial appeal as an equitable solution to dilemmas like the ones posed in the DES cases. Theoretically, injured plaintiffs are allowed to recover their damages, and, because damages are apportioned according to each defendant's market share, defendants are not subjected to excessive liability. Unfortunately, as this Article has illustrated, the doctrine cannot withstand close analysis.

Sindell adapted the alternative liability doctrine to fit the DES cases in part because it wanted to further the risk spreading and deterrence goals of modern products liability law.[192] In *Sindell* the court specifically cited these two objectives as a basis for its decision.[193] One of the primary problems of the market share theory is that the various requirements of the doctrine significantly impair its ability to encourage risk distribution without creating over-deterrence. For example, the market share theory requires

189. *See* notes 6-9 *supra* and accompanying text. The evidence concerning adenosis is incomplete. Future research may show that adenosis is indeed quite harmful.

190. *See, e.g.*, Ferrara v. Galluchio, 5 N.Y.2d 16, 152 N.E.2d 249, 176 N.Y.S.2d 996 (1958).

191. *Id.*

192. Comment, *supra* note 2, at 1005-06; Note, *supra* note 6, at 704-06.

193. Sindell v. Abbott Laboratories, 26 Cal. 3d 588, 610-11, 607 P.2d 924, 936, 163 Cal. Rptr. 132, 144, *cert. denied*, 449 U.S. 912 (1980).

that enough defendants be joined to represent a "substantial share" of the market.[194] The doctrine also allows any defendant to escape liability completely upon a showing that it could not have caused the injury to the plaintiff[195] and holds the remaining defendants liable for the entire amount of the judgment even though the market may not be represented fully in the lawsuit.[196] Although these requirements were designed to legitimate market share liability as a derivative of alternative liability, they are not consistent with conventional risk distribution principles because they inevitably will prevent damages from being apportioned according to each defendant's market share.[197] Under these circumstances, the courts will be able to achieve their risk distribution goals only by imposing on the industry a much greater hardship than is actually necessary.

Furthermore, the market share liability theory fails to achieve the goals of its progenitor—alternative liability. Alternative liability is a fault-based doctrine that is designed to impose liability in cases in which the application of traditional rules of causation would result in a finding for the defendants even though moral blame is high.[198] Market share liability, however, can dilute blame to the point of insignificance because of the large number of potential defendants and the lack of assurance that the actual culprit is before the court.[199] Thus, the justifications that typically are given for the alternative liability theory do not provide support for the market share liability theory.

Whether the plaintiff's losses ought to be shifted is a policy question that the individual court must decide for itself. If a court does choose to transfer losses from the innocent plaintiff to the defendants, some mechanism other than market share liability ought to be used to effectuate the shift. Although there is some order in the manner in which the doctrine imposes liability, the doctrine appears capable of allocating losses among defendants on a speculative basis. A potential defendant's belief that liability under the theory is imposed haphazardly may cause that defendant to withdraw the item entirely from the market. If a sufficient number of potential defendants react in this manner, then the en-

194. 20 WASHBURN L.J., *supra* note 79, at 476 n.60.
195. Note, *supra* note 160, at 448; *see* text accompanying notes 114-15 *supra*.
196. *See* notes 116-30 *supra* and accompanying text.
197. *See generally* part III *supra*.
198. *See* notes 44-71 *supra* and accompanying text.
199. *See* notes 93-109 *supra* and accompanying text.

tire industry could be disrupted.

Sindell is part of a trend among jurisdictions to relax established principles of tort law when necessary to permit recovery.[200] The rules that result from this relaxation frequently do not provide juries with sufficient guidance to make their determinations. The current bent toward applying comparative negligence in strict liability cases is illustrative of this point.[201] Although it is logically impossible to compare the plaintiff's negligence with the defendant's strict liability, many courts nevertheless have required juries to make such a comparison. The courts' failure to provide adequate guidance invites juries to decide cases based either on speculation or on considerations that are irrelevant to the case.

If the market share liability theory is extended to its logical conclusion, its principles theoretically could apply to all cases in which causation is questionable.[202] Under the market share theory, the defendant's liability is discounted by the probability that it did not cause the plaintiff's harm. One commentator has suggested that this approach should be applied in comparative negligence cases in which causation is uncertain.[203] Another writer has urged that the theory should be adopted in cases in which buried chemical waste has caused harm to the plaintiff.[204] Conceivably, courts eventually could impose liability solely in proportion to the mere probability that the defendant was responsible for the plaintiff's injury.

The DES cases provide an excellent illustration of the interaction between probabilities and the market share liability theory. Two separate questions of causation are present in these cases.[205] First, the plaintiff must prove that her mother's use of DES caused the injury—either adenosis or adenocarcinoma—that she sustained. Second, the plaintiff must prove that a specific defendant supplied the DES that her mother consumed. The *Sindell* court

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200. Namm v. Charles E. Frosst & Co., 178 N.J. Super. 19, 427 A.2d 1121 (1981); Comment, *supra* note 2, at 996. *See generally* Epstein, *supra* note 35. Although market share liability does not impose absolute liability on defendants, it does relax the already liberal rules of products liability law. In this sense, market share liability is at least a step in the direction of absolute liability.

201. For a discussion of this trend, see Fischer, *Products Liability—Applicability of Comparative Negligence*, 43 Mo. L. Rev. 431 (1978).

202. A. Becht & F. Miller, *supra* note 61, at 128-30; Malone, *supra* note 40, at 80-81.

203. Twerski, *The Many Faces of Misuse: An Inquiry Into the Emerging Doctrine of Comparative Causation*, 29 Mercer L. Rev. 403, 413-14 (1978).

204. 14 U. Mich. J. of L. Ref. 53 (1980).

205. Note, *supra* note 6, at 714.

modified the latter aspect of causation and basically held the defendants liable according to the probability that their product caused the harm. The initial causation question, however, could also be decided on a probability theory. For example, twenty-nine percent of the reported adenocarcinoma cases apparently occured even though the patient's mother had no exposure to DES.[206] Therefore, it is not clear that all cases of adenocarcinoma associated with the use of DES actually were caused by DES. The diagnosis that the DES caused the plaintiff's harm can only be made by examining family history and other important information, and even then doctors cannot be certain that the drug caused the patient to develop adenocarcinoma.[207] If the only available evidence showed a forty percent chance that DES caused the plaintiff's illness, then, under the traditional "more likely than not" rule of causation, the plaintiff would not be able to recover. If a probability theory were applied, however, the plaintiff would be able to recover forty percent of her damages from the supplier of the drug.

Using probability to discount the plaintiff's recovery in all cases of questionable causation could result in over-deterrence for many of the same reasons that market share liability in its present form may have this effect. First, it would greatly increase the potential liability of defendants. Courts would allow substantial recoveries in many cases in which plaintiffs could not present an acceptable case under the traditional approach. Clearly, this increased liability exposure would inhibit the marketing of useful products if potential defendants fear that their losses will be too prohibitive for them to pass on to the public.[208]

The second major drawback to a logical extension of the market share theory is that problems of proof may arise, which in turn creates the possibility of irrational verdicts. The theory by definition permits recovery in cases in which the evidence is inadequate to place responsibility upon any particular defendant. Theoretically, courts could require a finding of the probability of causation by the traditional "more likely than not" standard. Even if courts were to do this, however, application of the standard probably would not be workable in practice. Although a court is justified in instructing the jury to find causation on a "more likely than not"

206. *See* notes 11-16 *supra* and accompanying text.
207. Note, *supra* note 6, at 696, 713-14.
208. *See* notes 172-86 *supra* and accompanying text.

basis, the court will be inviting jury confusion if it instructs the jury to find the defendant liable only if it finds that the *probability* of causation is more likely than not. In other words, using the DES hypothetical posed above, to hold the defendant liable the jury must find that a fifty-one percent probability exists that the defendant created a forty percent risk of causing the harm. A jury that fails to comprehend such an instruction might decide the issue on sheer speculation. If the jury does make a speculative determination, the defendants could be held liable for more harm than they possibly could have caused.

A third factor militating against using probability to discount the plaintiff's recovery in all cases of questionable causation is the litigation costs that would be associated with such a theory. If, for example, three cases arise in which a one-third probability exists that defendant X caused the alleged harm, then in theory X should be liable for one-third of the damages in each case because he is statistically likely to have caused one hundred percent of the damages in one of the cases—if the damages in all three cases are the same. Defendant X's litigation costs, however, would be three times higher than normal because X was forced to participate in three cases rather than one.

A major problem in the law of products liability is the failure of courts to account for the effect of excessive liability on potential defendants. While the goal of compensating injured accident victims is worthwhile, it cannot be regarded as the sole objective of tort law.[209] The adversary system was designed to resolve disputes among individuals in an impartial manner, and any attempt to convert it into a compensation system will fail because of the enormous cost to society.[210] The market share liability theory is a dangerous step towards just such a conversion, and courts in the future should reject it as a method for imposing liability in civil cases.

209. Epstein, *supra* note 35, at 644-45, 659.
210. *Id.* at 660-61.