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NEGLIGENCE OR STRICT PRODUCT LIABILITY: IS THERE REALLY A DIFFERENCE IN LAW OR ECONOMICS?

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I. Introduction

The contemporary student of tort law cannot help but be struck by two dominant and recurring themes. First, there is the "setting" in which modern, or at least post-1963, tort law is typically presented. Much the same as in a contemporary course in criminal procedure, where the material is often analyzed in the context of the "tension" between individual rights and freedom and the public policy necessity of dealing effectively with criminal activity, so in torts the subject is taught in the context of the "tension" between negligence and strict liability.² Although this is generally true of nearly every area of tort law, whether nuisance, ultrahazardous activities or invasion of privacy, it is especially true of the products liability area. Moreover, this so-called "tension" between and juxtaposition of these two bases of liability is the recurring theme both in general torts law case books, as well as in more specialized texts and monographs devoted exclusively to the increasingly complex and specialized area of products liability law.3

The second dominant and recurring theme of modern tort law in general, and of product liability law in particular, is that of the "enormous" doctrinal shifts which have occurred beginning with

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¹ It was in 1963, in the landmark case of Greenman v. Yuba Power Products, Inc., 59 Cal.2d 57, 377 P.2d 897, 27 Cal. Rptr. 697 (1963), that California became the first jurisdiction in the United States to adopt strict tort liability for defective products. Shortly thereafter, and based almost exclusively on *Greenman* and a New York products liability case involving a breach of warranty (Goldberg v. Kollsman Instrument Corp., 12 N.Y.2d 432, 191 N.E.2d 81, 240 N.Y.S.2d 592 (1963)), the American Law Institute adopted what has perhaps become the best known and most often applied section of the RESTATEMENT (SECOND) OF TORTS, § 402A (1965), which sets forth the essential elements of strict product liability.

² See, e.g., C. Gregory, H. Kalven, & R. Epstein, Cases and Materials on Torts (3d ed. 1977).

³ E.g., see D. Noel & J. Phillips, Products Liability in a Nutshell (1974).

Judge Cardozo's landmark decision in MacPherson v. Buick Motor Co. 4 abolishing the necessity of the plaintiff's showing that he was in privity of contract with the defendant, and (in some sense) ending with Judge Traynor's decision in Greenman v. Yuba Power Products, Inc., abolishing the plaintiff's need to prove negligence on the part of the manufacturer in the design and/or production of his product. The expansion of the strict liability framework to the area of product liability effectively relieved the plaintiff of showing both that he was a member of a class of persons to whom the defendant owed a duty of care and, that given the duty, the defect in the defendant's product which caused the plaintiff's injury was the result of the defendant's failure to exercise reasonable and due care to discover and correct the defect, warn against the potential danger, etc. By and large, strict liability in tort has eliminated these obstacles of the plaintiff. It is for this and several other reasons that the doctrinal shift from negligence to strict liability in the product liability area has been hailed as a "revolution."

Both this doctrinal shift and the theme of the "tension" between negligence and strict liability serve to give the impression that there is a fundamental difference between these two standards of liability in tort. Moreover, this difference is thought to extend not only to the legal significance of these two bases of product liability, in terms of such matters as evidence, proof and burden, but also to their economic significance. Courts, as well as editors of law case books and authors of law journal articles almost universally attribute significant and different economic consequences to negligence and strict tort liability.

The reason for this impression, both in contemporary judicial decisions as well as in the professional literature, may be due in large part to the exposition by Judge Traynor in his concurring opinion in *Escola v. Coca Cola Bottling Co.* of the reasons why the "manufacturer's negligence should no longer be singled out as

^{1 217} N.Y. 382, 111 N.E. 1050 (1916).

^{5 59} Cal.2d 57, 377 P.2d 897, 27 Cal. Rptr. 697 (1963).

^{*} It is interesting to note Judge Traynor's view of the role and significance of Judge Cardozo's opinion in *MacPherson* to wit:

Judge Cardozo's reasoning recognized the injured person as the real party in interest and effectively disposed of the theory that the liability of the manufacturer incurred by his warranty should apply only to the immediate purchasers. It thus paves the way for a standard of liability that would make the manufacturer guarantee the safety of his product even when there is no negligence.

Escola v. Coca Cola Bottling Co., 24 Cal.2d 453, 150 P.2d 436, 442 (1944).

the basis of a plaintiff's right to recover in cases like the present one." As every student of the subject has come to appreciate, Judge Traynor's statement has easily become the best known and most frequently cited judicial exposition of the principal justification for abandoning negligence as the basis for liability in products injury cases and adopting a standard of strict liability in tort.

II. JUSTIFICATIONS FOR STRICT PRODUCT LIABILITY

Proof of negligence in product liability cases is often very difficult, if not impossible. By 1963, application of the doctrine of res ipsa loquitur had been stretched to where it was tantamount to the imposition of the principle of strict liability. Moreover, strict liability was, in effect, already the standard and basis for liability in cases brought under a breach of warranty theory. For these reasons, Judge Traynor felt strict liability should replace negligence as the basis for liability in products injury cases.⁸

In addition, the manufacturer is in the best position to minimize the risk of harm and loss due to product related injuries, in part because the manufacturer is responsible for the product design and in part because he is in a better position to assure the integrity of

⁷ 24 Cal.2d 453, 150 P.2d 436 (1944) (restaurant waitress severely injured by exploding bottle of Coca-Cola while placing bottle in refrigerator).

An injured person, however, is not ordinarily in a position to refute such evidence or identify the cause of the defect, for he can hardly be familiar with the manufacturing process as the manufacturer himself is. In leaving it to the jury to decide whether the inference has been dispelled, regardless of the evidence against it, the negligence rule approaches the rule of strict liability. It is needlessly circuitous to make negligence the basis of recovery and impose what is in reality liability without negligence. If public policy demands that a manufacturer of goods be responsible for their quality regardless of negligence there is no reason not to fix that responsibility openly.

Id. at 441 (Traynor, J.).

An additional and more recent justification for strict liability is that by moving from a negligence to a strict liability standard, administrative and adjudicative costs will be reduced. This result is not at all clear, in theory or fact. Although the issues and uncertainties surrounding litigation might be fewer and simpler under strict liability than under a negligence standard, the scope of liability is greater. Moreover, because strict product liability has the effect of increasing the likelihood that manufacturers will be held liable for product related accidents, the number of claims and court cases will, for this reason alone, increase. And, since strict liability also increases the injured plaintiff's likelihood of prevailing at trial, the amount of money the plaintiff (or time his lawyer) is willing to spend on litigation is likely to increase. Accordingly, neither the direction nor the magnitude of change in administrative and adjudicative costs, including the costs of litigation are at all clear. The available empirical evidence suggests that, in fact, these costs have increased dramatically in recent years. Over one million claims were brought for product related injuries in 1976, with over half these claims involving litigation.

the actual production of the product, through inspection and other means of quality assurance and control. Furthermore, the manufacturer is better able to "spread" the loss attendant a product related injury and distribute the cost of such accidents among the consumers of the particular product, by increasing prices to cover the cost of such losses and damage judgments (self-insurance) or the cost of product liability insurance. Finally, by holding the manufacturer strictly liable, he will have a greater economic incentive to design and produce safer products.

The courts had, by 1963, applied a standard of strict liability in cases involving injury to consumers of food stuffs and food products for a number of decades. Since there is no theoretical or practical basis upon which to differentiate as between food and other consumer products, logic as well as judicial precedent appeared to call for the extension of a rule of strict manufacturer liability to all products, food and non-food alike.¹²

Escola at 440, 443 (Traynor, J.).

Even if there is no negligence, however, public policy demands that responsibility be fixed whenever it will most effectively reduce the hazards to life and health inherent in defective products that reach the market. The consumer no longer has means or skill enough to investigate for himself the soundness of a product, even when it is not contained in a sealed package, and his erstwhile vigilance has been lulled by the steady efforts of manufacturers to build up confidence by advertising and marketing devices such as trademarks.

Those who suffer injury from defective products are unprepared to meet its consequences. The cost of an injury and the loss of time or health may be an overwhelming misfortune to the person injured, and a needless one, for the risk of injury can be insured by the manufacturer and distributed among the public as a cost of doing business.

Id. at 441.

[&]quot;It is to the public interest to discourage the marketing of products having defects that are a menace to the public. If such products nevertheless find their way into the market it is to the public interest to place the responsibility for whatever injury they may cause upon the manufacturer, who, even if he is not negligent in the manufacture of the product, is responsible for its reaching the market. Against such a risk there should be general and constant protection and the manufacturer is best situated to afford such protection.

Id.

This court and many others have extended protection according to such a standard to consumers of food products taking the view that the right of a consumer injured by unwholesome food does not depend "upon the intricacies of the law of sales" and that the warranty of the manufacturer to the consumer in absence of privity of contract rests on public policy. Dangers to life and health inhere in other consumers' goods that are defective and there is no reason to differentiate them from the dangers of defective food products.

Id. at 442.

A. Proof of Negligence

As to the first of the several justifications for the adoption of a rule of strict product liability, namely the easing of the plaintiff's burden of proof, there may be some doubt. It is true that the plaintiff no longer need establish privity of contract, or prove either that the defendant owed him a duty of care, or that the defendant manufacturer did not exercise reasonable care to discover and eliminate the product defect. However, in pursuing his action on the basis of strict liability the plaintiff still must establish the defect in the product. prove either that the defect was the result of the defendant manufacturer's design and/or production process, or alternatively, that the defect was present in the product at the time it left the manufacturer's control, and that the cause of his injury was the product's defect. Moreover, traditional defenses such as assumption of risk. product misuse and what in some cases has amounted to contributory negligence, remain very much a part of the law of product liability, whether based on negligence or strict liability.

Of all the elements of the plaintiff's cause of action in strict liability, perhaps the most difficult burden is that of proving that the product in question was defective and that this was the cause of the plaintiff's injury. In the absence of a defect in the product, whether due to design, the production process or mistaken or inadequate instructions and warnings, no liability for injury related to a product will be found. Yet, in the proof of a product defect lies a task almost equal in difficulty to the proof of a manufacturer's negligence. Proving product design defect(s) is, for all practical purposes, the equivalent of proving the manufacturer's negligence in the design of the product. As in a plaintiff's negligence cause of action, elements such as custom in the industry, the cost and practicability of safer design, the likelihood of the injury occurring and the like are present in a product liability suit brought under strict liability.

The form in which courts of approximately forty jurisdictions have adopted strict liability in product cases, namely the Restatement (Second) of Torts, section 402A (1965), has led to the reintroduction of some elements of negligence into the burden of proof of a plaintiff bringing an action under strict liability.¹³ The bifurcated standard implicit in section 402A has been read and

¹³ Section 402A of the RESTATEMENT (SECOND) OF TORTS (1965): "One who sells any product in a defective condition *unreasonably* dangerous to the user or consumer or to his property is subject to liability . . ." (emphasis added).

applied by many courts in such a manner as to require the plaintiff to prove both that the product was defective and that the defect rendered the product "unreasonably dangerous." Some courts, most notably in California, have therefore expressly rejected this aspect of the Restatement's formulation of the strict liability standard for products and require only that the product's defect be established. This attempt to prevent returning to the negligence standard or, in the opinion of others, to accelerate the shift from the negligence standard has by no means been widely adopted outside of California.

B. Economic Justifications for Strict Liability

There appears to be an increasing awareness among the judiciary, practicing attorneys and scholars in the field that the legal implications, in the form of the difficulty and burden of proof, of strict product liability are not as "revolutionary" as they may at first have appeared. The same is not true of what have become the accepted economic justifications of the doctrine. The economic justifications for strict liability, and for the shift from negligence to a strict liability standard (as originally set forth by Judge Traynor in Escola), remain an important and prominant part of the legal framework in the product liability area.

The notions that (1) liability should be strictly assigned to the manufacturer because he is the party in the "best position" to minimize the risk of harm and loss due to product-related injuries, (2) the manufacturer is better able to "spread" the loss attendant a product-related injury and distribute the associated costs among the consumers of the particular product, and (3) by holding the manufacturer strictly liable he will have a greater economic incentive to design and produce safer products, have become and remain an integral part of the "public policy" justifications incorporated into contemporary judicial decisions imposing strict liability on

In Cronin v. J. B. E. Olson Corp., 8 Cal.3d 121, 501 P.2d 1153, 104 Cal. Rptr. 433 (1972), although the court recognized that the "unreasonably dangerous" qualification was included by Dean Prosser, the reporter for the Restatement, to preclude the manufacturer from becoming what amounts to an insurer of his product(s) with respect to all harm attendant their use, even in the case of inherently or unavoidably dangerous products (e.g., drugs, alcohol, automobiles), the court rejected § 402A's "unreasonably dangerous" language. The court in Cronin felt that this language ". . . burdened the injured plaintiff with proof of an element which rings of negligence . . ." and felt that the ". . . requirement that a plaintiff also prove that the defect made the product 'unreasonably dangerous' places upon him a significantly increased burden and represents a step backward in the area pioneered by this court."

manufacturers of products. Perhaps not surprisingly, the relevant professional literature presents a remarkably consistent preference for the application of a strict liability standard, as opposed to the negligence standard. The justification for this preference almost without exception revolves around what are thought to be the desirable "public policy" consequences of the assignment of liability based on a strict liability rule.

The remainder of this Article provides a brief analysis of the several justifications, largely economic, legal scholars and the judiciary have (since Judge Traynor's concurring opinion in *Escola*) set forth as the basis for strict product liability. Before turning to an analysis of risk-minimization, loss-spreading and the question of product safety, one must focus briefly on the essentials of the economics of product liability.

1. The Basic Economics of Product Liability

The full economic cost to the consumer of a product is the nominal, or pecuniary price he pays for the product plus the expected accident cost. ¹⁶ The latter is equivalent to Judge Hand's formulation of the economic benefit to be gained by avoiding an accident: namely, the product of the probability of an accident occurring and the magnitude of the loss, measured in pecuniary terms, given that the accident in fact occurs. ¹⁷ Because the cost of a product to the consumer is made up of these two cost elements, neither the elimination of the privity limitation beginning with MacPherson and culminating in Henningsen v. Bloomfield Motors, Inc., ¹⁸ nor the imposition of strict liability, have had the pervasive and significant affects claimed.

Whether the manufacturer is or is not in privity with the consumer, and is not or is thereby shielded from liability, or whether a manufacturer is subject to a negligence or strict liability standard, he will, if he is profit maximizing, incorporate into his price and sell to the consumer cost justified product safety features. Moreover, as

¹⁵ See Calabresi & Hirschoff, Toward a Test for Strict Liability in Torts, 81 YALE L. J. 1055 (1972); Fletcher, Fairness and Utility in Tort Theory, 85 Harv. L. Rev. 537 (1972); and Epstein, A Theory of Strict Liability, 2 J. LEGAL STUDIES 151 (1973).

¹⁶ It should be noted that this is an accurate statement of the cost of a product—price plus expected accident cost—for a customer who has no positive (risk assuming) or negative (risk averting) propensity to incur or avert risk (a so-called "risk-neutral" consumer).

¹⁷ See United States v. Carroll Towing Co., 159 F.2d 169 (2d Cir. 1947) and Conway v. O'Brien, 111 F.2d 611 (2d Cir. 1940).

^{18 32} N.J. 358, 161 A.2d 69 (1960).

shall be seen, regardless of the liability standard, and historically, whether or not the privity limitation eliminated or substantially reduced the likelihood of the manufacturer being held liable, he will sell *only* cost justified product safety features to the consumer. Perhaps the simplest means of illustrating this proposition is by way of an arithmetic example.¹⁹

Irrespective of privity (or any other limitations with respect to a manufacturer's liability), or whether liability is imposed according to a negligence or strict liability standard, manufacturers will have an economic incentive to incorporate cost justified product safety features, and not to incorporate product safety features which are not cost justified.²⁰ By incorporating cost justified product safety features the manufacturer effectively lowers the total cost of the product to the consumer, which under most market conditions will enable the manufacturer to increase prices, and thereby increase profits.

Assume that the nominal (pecuniary) price of a product is \$20 and the expected accident cost \$0.20. The total cost to the consumer is \$20.20, if the consumer is "risk neutral." In the extreme, if the manufacturer were able to eliminate all the product's defects and hazards, and incorporate such safety features as would make the product "perfectly safe," he would be able to raise his price to the consumer by \$0.20. The consumer would be willing to pay a price of \$20.20 for the product, if it were "perfectly safe" and the expected accident cost were therefore zero.

More realistically, we might suppose that the manufacturer is able to reduce only the likelihood of an accident being "caused" by his product, and/or reduce the severity of the related injury if an accident occurs. Thus, if the manufacturer in the above example could, by designing and incorporating certain product safety features, reduce the expected accident cost from \$0.20 to say \$0.10, at a cost to the manufacturer of say \$0.06, he should be able to increase his price to the consumer by \$0.10, to \$20.10. The total cost of the

¹⁹ For a lucid examination of the operative economic principles, in the context of a simple arithmetic statement, see Posner, Strict Liability: A Comment, 2 J. LEGAL STUDIES 205 (1973); R. POSNER, ECONOMIC ANALYSIS OF LAW (1972).

²⁰ It should be noted that the term "cost justified" simply means that the resource cost of incorporating the product safety feature is less than the corresponding price, or increase in price, which the consumer of the product ("the market") is willing to pay therefor. Alternatively, "cost justified" can also be taken to mean the situation where the cost to the manufacturer of incorporating the product safety feature is less than the corresponding cost to the customer.

product to the consumer remains the same (\$20.20), a price of \$20.10 and a (reduced) expected accident cost of \$0.10. However, the manufacturer's per unit profits have increased by \$0.04. By incurring an increase in costs of \$0.06 per unit, the manufacturer has been able to increase his price by \$0.10 per unit.²¹

2. An Insurance Analogy

Before turning to the analysis of the several specific justifications for strict product liability, it may be helpful to consider briefly the shift from a negligence standard in the context of an insurance analogy. One way is to view what was previously called "the expected accident cost" as the equivalent of an insurance premium. The consumer in the above example, where the manufacturer was able to completely eliminate the product's potential hazards through the incorporation of appropriate safety features, was willing to pay the manufacturer a price of \$20.20. The consumer ought to be indifferent whether he pays the manufacturer an additional \$0.20 for eliminating the likelihood of an accident occurring, or pays an insurance carrier the equivalent in the form of an insurance premium, thereby transferring the risk.

Viewed in this context, it becomes clear that strict liability with product defect, and, in the extreme, strict liability without product defect, essentially increases the probability (to a limit of one) that the manufacturer will be held liable for all injuries resulting from accidents related to the use of his product, regardless of any surrounding circumstances. Through the application of liability assignment rules, manufacturers can be (are) forced to sell products in a "package." The latter is made up of the product itself and a more or less comprehensive, full coverage insurance policy insuring against the risk of accident and injury related to the particular product. The product price must, and for those firms remaining in business will, cover the manufacturing cost of the product plus the insurance premium or costs of self-insurance, to cover the damages "caused" by the product in its use by the average consumer.

Since the insurance premium costs implicit in such a "tied" product package necessarily reflect the damages incurred by and paid to the *average* consumer, it is likely that there will be some incidental economic effects. That is to say, only if manufacturers were in a

²¹ The exact magnitude of the increase in profits will, of course, depend largely on the demand conditions prevailing in the product market.

position to identify those consumers who sustained higher than average accident rates and damage costs, and charge them higher product prices, would the shift to strict liability not affect the levels and "mix" of safe and un-safe products. However, as a practical matter, manufacturers are not able to price discriminate in this manner.

The shift from a negligence standard to strict liability has probably resulted in fewer and less dangerous products. The shift has just as probably resulted in higher product prices, in that it generally requires resources (costs) to design and produce safer products. Although primary accident costs may thereby be reduced, accident prevention costs are likely to have increased. Since the insurance premium costs implicit in the product price reflect the damages incurred by and compensation paid to the average consumer, the shift to strict product liability has necessarily involved a redistribution of wealth from consumers experiencing low product-related accident rates and incurring low damages to consumers experiencing high product-related accident rates and incurring high damages.

Finally, it may be argued that since strict product liability amounts to the sale of a "tied" product package consisting of the product and full insurance protection, consumers will have less incentive to exercise due and reasonable care in the selection and use of products. Whether or not consumers actually have less incentive to exercise care in the selection and use of products under a strict standard of manufacturer's liability, it seems clear that if consumers are subject to a lower probability of bearing the costs of productrelated accidents, hazardous products will be less unattractive to consumers.²² This being the case, the quantity of such products demanded at any given price will be greater, relative to the quantity of such hazardous products demanded at any given price under a standard less strict, where the probability of the consumer bearing the cost of accidents is higher.23 Moreover, since under a strict liability standard manufacturers do face a higher likelihood of being held liable, and accordingly are more likely to carry and pay for insurance (or simply self-insure and pay the damage awards), hazardous products will be associated with higher costs at any given level of output of such products.24 It is in this sense that strict product

²² See McKean, Products Liability: Implications of Some Changing Property Rights, 84 Q.J. Econ. 611 (1970).

²³ In more technical economic terms, the demand function will shift to the right.

²⁴ The supply function will shift to the left.

liability is likely to have the effect of reducing the supply (the quantity supplied at any given price) of hazardous products.

However, because both the demand and supply functions of hazardous products shift, it cannot be inferred that the quantity of defective and dangerous products produced will decline, at least not as the result of the shift from a negligence to a strict liability standard. Nevertheless, it will be the case that under a strict product liability standard, consumers will pay higher products prices because they will face a forced "tie in" sale of the product plus insurance. Strict liability compels the manufacturer to provide the consumer with insurance coverage against the risk of injury attendant product-related accidents, where the accident is the result of a nonnegligent defect in the product. From the consumer's point of view, he is precluded from either assuming the risk attendant relatively hazardous (and less expensive) products, or self-insuring and obtaining his own insurance coverage.²⁵

A more detailed analysis of the three primary "public policy" justifications traditionally underlying both judicial decisions and legal commentaries on strict liability of the manufacturers of products will now be presented. For purposes of discussion, the formulation first set forth by Judge Traynor in *Escola* will serve as a convenient starting point.

3. The Manufacturer is in the Best Position to Minimize the Risk of Harm and Loss Due to Product Related Injuries

From a resource allocative perspective, the question of which party (to an accident producing event) "ought" to bear the costs of the product related accident should be framed within the principle that liability assignment rules should be constructed to provide for an economically efficient result. Given the maxim that resources are finite, it follows that there is an economically efficient level of re-

²⁵ As noted by Richard Posner in Economic Analysis of Law, supra note 19, the only circumstances in which this will increase economic efficiency — reduce resource costs — is if the manufacturer is a more efficient (lower cost) insurance carrier than commercial insurance companies specializing in product liability underwriting and if the consumer actually wants to purchase insurance coverage, rather than assume the risk of product-related accidents, i.e., wants to self-insure. The consumer would have an incentive to self-insure if he is the more efficient (lower cost) accident insurer, as may well be the case in a wide variety of instances. Moreover, if in fact the manufacturer, rather than either a commercial insurance carrier or the consumer himself, is the more efficient (lower cost) insurer, the manufacturer will have an economic incentive to provide insurance coverage for the buyers of his products even in the absence of strict liability.

sources which manufacturers and consumers should devote to designing and producing safer products. This economically efficient level is where the sum of the primary costs of accidents—namely, property damage, medical expenses and lost earnings—and the cost of safety and of preventing and avoiding product-related accidents, is minimized. The answer to the question "how much safety is enough" is the point at which the combined cost of accidents and safety and preventive measures is minimum.²⁶

One of the primary objectives of any system of accident law, in addition to compensation, should be to assign the rules used to assign liability in such a way as to encourage the "production" of an economically efficient level of both safety and safe products. To the extent that courts and legislatures assign liability for product-related accidents to the party with the lower accident prevention and avoidance costs, economic efficiency is served. Society is moved closer to the point at which the joint costs of accidents and accident prevention and avoidance costs are minimized. It is at this point that society as a whole is devoting the economically efficient level of resources to accident prevention and product safety.

The only meaningful sense in which manufacturers may be in the "best" position to minimize the risk of harm and loss due to product-related injuries is that manufacturers may be able to do so more efficiently (at lower cost) than the wholesaler, retailer or consumer. There is no question that for some, perhaps many, products, the manufacturer is indeed the most efficient accident preventer. In the case of many products, it is least costly for the manufacturer to engage in accident prevention by designing and producing a (safer) product and incorporating cost-justified safety features. A good example of this is the drug manufacturer's ability to warn the physician (and thereby indirectly the consumer) with respect to the potentially harmful side effects of using a particular drug. There can

²⁶ For a comprehensive exposition of this point see G. Calabresi, The Cost of Accidents (1970).

As we have already noted, Judge Traynor's choice of words in his concurring opinion in Escola which speaks of minimizing rather than "optimizing" the risk of harm and injury, is unfortunate, particularly because this language has been freely and broadly adopted by the legal community. The proper objective is not to minimize these risks. There is no question that save for a relatively small category of so-called "unavoidable accidents" (ones which cannot be prevented whatever amount of resources devoted to prevention), all accidents could be avoided if we were willing to devote sufficient resources to the task. The question, however, is at what cost? Accordingly, the proper statement of the objective is that such risks as those addressed by Judge Traynor should be "optimized."

be little, if any, question that the drug manufacturer is in a better, or even "best", position to do so. His knowledge of the chemistry and toxicity of the drug, the relatively low cost of providing adequate warnings by labeling, product literature, and the like, are among the factors supporting this argument.

It is equally certain that for other products, probably a significant number, the consumer and product user is the most efficient accident preventer or avoider. It may be significantly less costly for the consumer to devote resources, including time, to accident prevention or avoidance. One example is in product use. Although the manufacturer may be able to foresee and hence warn against certain types of product applications or uses which are or may be dangerous, it has been extremely difficult and costly for manufacturers to foresee the multitude and variety of uses to which consumers will put certain types of products. Furthermore, the consumer or product user is likely to be in a better and very likely the "best" position to know how he intends to use the particular product, and thus prevent or avoid accidents that are related to the product and result from its misuse.

Precisely because the difficulty and cost of preventing and avoiding accidents is not, generally, the same for each party, manufacturer and consumer, one particular liability assignment rule can and will be more efficient than another. As already noted, to the extent that such rules are fashioned to assign liability for product-related accidents to the party with the lower accident prevention or avoidance costs, whether that party is the manufacturer or the consumer, economic efficiency is served. Placing the incentive for risk prevention on the party best able to implement risk prevention techniques is, or should be, the equivalent of placing liability for product-related accidents on the party whose costs of accident prevention or avoidance are lowest.

4. The Manufacturer is Better Able to "Spread" the Loss Attendant a Product Related Injury

One sense in which the manufacturer may be better able to

²⁸ Product liability litigation and the reporting of these cases is replete with what are often nothing less than astounding examples of product misuse. First year law students read the case (or its equivalent) where the defendant manufacturer was held liable for inadequate instructions/warnings as to product use in that he failed to warn against the use of a power lawn mower to trim hedges and other shrubbery and the plaintiff in fact so used the product and was injured when he dropped the lawn mower on his foot.

"spread" the primary costs of accidents is in the insurance or underwriting context already discussed. However, as was true in the context of risk prevention, this ability to spread costs may or may not be the case. Whether this is the case in any particular instance will depend upon the particular product, as well as on the particular manufacturer. However, there is no a priori or theoretical basis to presume that manufacturers are more efficient (lower cost) "loss spreaders" than either commercial insurance underwriters or consumers.

The other possible basis for offering "loss-spreading" as a justification for imposing strict liability on manufacturing enterprises is that it is socially desirable to shift the burden of the cost of accidents from the unfortunate injured individual to a larger number of persons. Although it may be an appealing notion morally, the idea that shifting a large loss from the individual accident victim to a group of individuals (each of whom bears only a small fraction of the total accident cost) increases economic welfare has no basis in economic theory.²⁹

This more or less moralistic view of the accident law system, and of what specific rules of liability assignment should accomplish, has, unfortunately, led to the widely held view that the primary cost of product-related accidents should be imposed on the party "best able" to absorb such costs. This party is more often than not the manufacturer, irrespective of whether he is able to pass such costs on to the consumers of the particular product in the form of higher prices. If the manufacturer cannot pass on the costs, as determined primarily by the characteristics of the market demand for the particular product, then he will "absorb" the cost of product-related accidents. To the extent that this results in lower profits, the owners of the manufacturing enterprise, namely the stockholders, will "absorb" these costs, in the form of lower dividends and/or lower capital gains income.

Characterization of the principles of negligence law in moral terms does not advance our analysis and understanding of the liability assignment rule. Strict liability, certainly no less than a negligence standard, is an objective standard.³⁰ "Deep pocket" rules of

The literature of economics has dealt extensively with this subject. The notion that the total welfare loss of say one hundred persons, each incurring a \$1 cost, is less than that of one person incurring a \$100 cost stems from the misapplication of the concept of the diminishing marginal utility of money.

³⁰ For an excellent exposition of this point, see Posner, A Theory of Negligence, 1 J. LEGAL

liability assignment, or any rule imposing liability for accident damages on the basis of which party "ought" to pay, or is "best able" to pay, reflect the moral judgments of judges, juries, or legislatures as to the proper distribution of wealth. Just as descriptive terms such as "fault", "blame" and "responsibility" do not, or should not, play a role in a negligence standard for the assignment of liability, so too terms such as "ought" (to pay) or "best able" (to pay) serve no useful purpose with respect to a discussion of a strict liability standard. To whom the costs of product-related accidents "belong" and whether the manufacturer or consumer bears those costs, are questions neither relevant to nor helpful in the task of developing an economically efficient set of liability assignment rules in the context of our system of accident law.

Even if "loss spreading" were economically beneficial, or if society determined that such "loss spreading" was desirable, neither strict liability nor negligence appears the preferable rule to achieve this goal. Under strict liability, the manufacturer will pass on and so "spread" the cost of accidents among consumers, in the form of higher prices, to cover product liability insurance premiums and damages for which the firm is self-insured. Where manufacturers are held liable only for their negligent acts involving products, consumers could insure themselves against uncompensated accidents and injuries attending the use of defective or dangerous products. In this case, the accident costs and "loss spreading" would be among the customers of commercial insurance carriers. As previously noted, only if there is some reason to believe that manufacturers are more efficient (lower cost) insurers than consumers would a rule of strict liability assignment be preferable to negligence for "loss spreading" purposes.

STUDIES 30 (1972). One of the earliest, and certainly one of the most widely adopted definitions of negligence, namely that of Judge Hand in United States v. Carroll Towing Co., 159 F.2d 169 (2d Cir. 1947), clearly makes negligence an objective standard. Under the Hand formula, if the product of the probability of an accident's occurrence and the cost of injury and loss, given that the accident occurs, is greater than the cost of preventing or avoiding the accident, the failure to take the necessary precautions — and incurring the cost attendant thereto—will be held to be negligent. Hand's formulation of the negligence standard, and what constitutes behavior amounting to a breach of a standard of due care, is essentially an economic formulation. The Hand formula simply states that if an expected accident cost of say \$1,000 can be prevented or avoided by the expenditure of \$900, it will be held to be negligent not to do so because in so doing, \$100 of resources can be "saved."

5. By Holding the Manufacturer Strictly Liable, He Will Have a Greater Economic Incentive to Design and Manufacture Safer Products

A basic premise implicit in and underlying this justification for imposing strict liability on manufacturers is that a function, both of our system of accident law and of how liability assignment rules impose accident costs, is to regulate safety.31 Although the past decade has brought an increase of no small proportions in the direct government regulation of safety, from the Occupational Safety and Health Administration to the Consumer Products Safety Commission, there is no question that the legal system's development of private causes of action can serve as an alternative to direct government regulation of safety. However, although regulation of safety may be implicit in Judge Traynor's exposition of the justifications for strict product liability, this view is not universally held by either the judiciary or legal scholars.³² An equally, if not more widely held view is that the primary purpose of our, or any, system of accident law, whether operating under rules of negligence or strict liability. is to compensate accident victims for the primary cost of injury, including medical expenses, loss of earnings and pain and suffering.33

A second theme running through the "safety justification" for the doctrinal shift from negligence to strict liability is that the effect of this shift has been to "internalize" the cost of accidents and product-related injuries. By so "internalizing" accident costs, the manufacturer is explicitly forced to take into account these costs (because they are now "his") in decisions regarding product design, manufacture and distribution.³⁴ However, as already seen, to whom

³¹ That is to say, a function of accident law is to develop a set of rules for the assignment of liability which will provide economic incentives among the various parties to engage in the economically efficient level of accident prevention and avoidance.

³² For an incisive analysis of this position — that the primary function of our system of accident law is compensation — and how universally this view is held in the context of what has been described as the "orthodox" view of negligence, see Posner note 30 supra.

³³ It is interesting to note that historically, and among some of the most influential legal scholars of the time, compensation was *not* regarded as being even an ancillary function of the accident law system. See O. Holmes, Jr., The Common Law (1881) and Holmes, Trespass and Negligence, 14 Am. L. Rev. 1, 15-20 (1880).

³⁴ Historically, until approximately the beginning of the nineteenth century, liability for the damages resulting from an accident producing interaction between parties was assigned quite irrespective of fault. Liability was tantamount to being strict in the modern sense. With the industrialization of the nineteenth century, what amounted to a "no fault" standard of liability was abandoned in favor of a negligence standard. One of the justifications for this

the cost of the accident belongs and which party bears the cost, are questions that are neither relevant to nor helpful in a discussion of either accident law or the differences between negligence and strict liability.³⁵ In the context of our earlier discussion, the relevant question is which party is the more efficient, that is lower cost, accident preventer or avoider.

At one extreme, under a system of caveat emptor and no manufacturer liability, consumers have a strong incentive to undertake safety measures that cost less than the relevant expected accident cost. However, under such a system, manufacturers are seen as having little if any incentive to design and incorporate safety features into their products. At the other extreme, under a system of caveat venditor and strict manufacturer liability, manufacturers have a strong incentive to engage in safety measures and produce safe products. However, under such a system, consumers may have little if any incentive to undertake safety measures and precautions to avoid accidents. It becomes increasingly apparent that the justification for strict liability, that safer products will necessarily be produced as a result, is largely spurious.

As previously mentioned, given that the cost of a potentially hazardous product to the consumer is the sum of the product price and the expected accident cost, quite independent of the liability assignment rule, the profit-maximizing manufacturer will have an economic incentive to incorporate cost justified safety features into his product. By so doing, the manufacturer is in a position to lower the total cost of the product to the consumer, and thus sell a greater quantity and/or raise his price, resulting in higher total profits. Conversely, in those instances where the consumer is able to prevent or avoid the accident at a cost less than that incurred by the manufacturer, the consumer will have an economic incentive to do so because he will enjoy the product at a cost lower (price plus expected accident cost) than if the manufacturer engaged in the safety measure(s).

nineteenth century doctrinal shift was that the so-called "infant industries" of the time required what amounted to subsidies. It was thought that by moving from what amounted to a "no fault" system to a negligence standard such a subsidy would be provided. Accident costs would be "externalized" and shifted from the enterprise which "caused" the accidents, through hazardous products and dangerous working conditions, to consumers and workers.

³⁵ As noted by Richard Posner ". . .the relevant question from the standpoint of economic analysis is who could prevent the loss at lower cost, not whose cost the damage 'really' is." See R. Posner, note 19 supra, at 137.

The question is, however, will the imposition of strict liability, or in the extreme, strict product liability without defect, lead the manufacturer to do any more than engage in cost justified safety measures? Will strict liability serve to create economic incentives for the manufacturer to design and produce products which are safer than those which he would design and produce under a negligence standard?

Imposing strict liability on manufacturers leads the manufacturer to take into account the primary cost of accidents "caused" by his product(s) and compare that cost with the cost of designing and producing a safer product. The primary accident costs will be the manufacturer's estimate of the judgments and damage awards he will have to pay, if he self-insures, or the cost of product liability insurance. However, neither the underlying economics nor the profit maximization incentives of the manufacturer will be changed, or "over-ridden", by alternative liability assignment rules. As already noted, even if the prevailing system of accident law imposed no liability on manufacturers, they would nevertheless have an economic incentive to incorporate cost justified safety features into their products because they could increase their profits. However, the manufacturer has no different or greater incentive under a strict, or even absolute, liability standard. He will not, as a result, make his product any safer than would be the case if he were not held liable.

Since strict liability "internalizes" primary accident costs, the manufacturer will compare these to the costs of accident prevention, that is, the cost of making his product safer. However, if the manufacturer is profit-maximizing, he will choose to pay the judgments and damages for accidents "caused" by his products where these costs are less than the cost of preventing the accident, that is, the cost of designing or producing a safer product. The similarity to the negligence standard is striking. If a manufacturer is profit-maximizing, and if the expected cost of an accident (or class of accidents related to a given product) is less than the cost of accident prevention, the manufacturer will choose to pay the tort judgment(s) for injuries sustained by consumers, rather than incur the greater cost of preventing the accident and thereby avoiding liability.³⁶

³⁶ It is precisely for this *economic* reason that even under an absolute liability assignment rule, product related accidents will occur. It is simply "economical" to allow some accidents to happen, even where the expected accident cost may appear to be high. There is an

III. CONCLUSION

In conclusion, it seems reasonably clear that the difference between a negligence standard and strict liability, at least with respect to the safety/accident "mix", will not be significantly different. The level of safety and accidents and the cost of accidents, are not likely to differ significantly between the two standards. Products are not apt to change dramatically as to their safety characteristics. Nor is the cost of products to the consumer, namely the price plus the expected accident cost, likely to change significantly, if at all, by virtue of the shift from negligence to strict liability. Although the expected accident cost may decrease, the price of the product is likely to increase in a manner resulting in approximately the same total cost to the consumer.³⁷ However, even though the choice of liability assignment rules is not likely to result in any significant change in safety and accident levels, product safety characteristics. or the cost of products to the consumer, this doctrinal shift is likely to have at least one important economic effect. Since strict liability essentially forces manufacturers to insure customers against injuries and property damage "caused" by defective products in the absence of negligence, whether resource allocative efficiency increases or decreases as a result will depend on whether manufacturers are lower cost accident insurers than commercial insurance underwriters and whether the consumer prefers to purchase the insurance implicit in the product price, or would rather self insure.38

This Article has focused on the economic costs and benefits of what are commonly thought to be two very different standards or rules of liability assignment, negligence and strict liability. As demonstrated, the differences in both law and economics are fewer rather than more, less rather than greater, and more apparent than real. Undoubtedly, the doctrinal shift from negligence to strict prod-

[&]quot;optimum," economically efficient level of product related accidents. Even if liability assignment rules are developed to ostensibly induce (or force) manufacturers to design and produce safer products, such rules are not likely to reduce the number of accidents below this level.

³⁷ However, consumers are forced to purchase safer products. To the extent that consumers of a particular product are risk preferring, and do not value highly the decrease in the probability of the product "causing" an accident, they will be worse off under a rule of strict liability. Such risk preferring consumers are not willing to pay for product safety features which cost less than the expected accident cost which could be avoided by the safety features. Moreover, if in fact many consumers are risk preferrers, as is likely to be the case for certain products (e.g., skateboards), the level of safety and accidents may differ as between a negligence and strict liability standard.

For a further discussion of this point, see R. Posner, supra note 19, at 62, 111.

uct liability has resulted in some changes within our system of accident law. However, with respect to what ultimately "counts", namely accident and safety levels, the changes are likely to have been a great deal less than might have been envisioned by Judge Traynor and others when the doctrine of strict liability was first extended to non-food products approximately fifteen years ago.