MANUFACTURERS' LIABILITY: AN EXAMINATION OF THE POLICY AND SOCIAL COST OF A NEW REGIME

By SERGE GALITSKY*

The author notes the world-wide legislative trend toward strict manufacturers' liability and examines policy arguments favouring such regimes. To determine whether any other regime is "better" entails an economic analysis of the various alternatives. After an examination of relevant existing economic literature, the author concludes that, in general, strict liability provides a superior regime for liability. However, he questions whether the recently added Division 2A of Part V of the Trade Practices Act 1974 (Cth) provides the best legislative scheme. Instead, he considers that it merely engrafts manufacturers' liability onto the contractual framework without really considering which groups of people are to be protected, nor the precise extent of such protection.

I INTRODUCTION: THE NEW STRICT LIABILITY

In recent years, a number of jurisdictions throughout the world either have legislated to impose a greater measure of liability for defective products upon manufacturers, or have instituted official inquiries which have recommended such legislation.¹ Even in the United States, where judge-made law already has imposed strict liability for product defects upon manufacturers,² there have been further legislative initiatives

Practices Act 1974 (Cth) (1976).

² P. Legh-Jones, "Products Liability: Consumer Protection in America" (1969)

27 Camb. L.J. 54; R. Pasley, "The Protection of the Purchaser and Consumer under the Law of the U.S.A." (1969) 32 Mod. L. Rev. 241; W. Prosser, "The Fall of the Citadel: Strict Liability to the Consumer" (1965-1966) 50 Minn. L.R. 791.

^{*}B.A., LL.M. (Syd.); Solicitor of the Supreme Court of N.S.W.; Lecturer in Business Law, Macquarie University. The author gratefully acknowledges the assistance of the late Dr E. Bloomfield, former Senior Lecturer in Management at Macquarie University, and Mr G. Braddock, Lecturer in Economics at Macquarie University. Responsibility for opinions and any shortcomings resides with the author.

¹ U.K. Law Commission No. 82 and Scottish Law Commission No. 45: Report on Liability for Defective Products (1977) Cmnd 6831; Strasbourg Convention on Products Liability in Regard to Personal Injury and Death (open for signature since January 1977) and Preliminary Draft Directive Commission European Communities (1976) (aimed at achieving consistency among the laws of the E.E.C. member countries relating to product liability: both these references are reproduced as appendices to Product Liability in Europe (1975), a collection of reports from a conference of the Association Européenne d'Etudes Jurisques et Fiscal. For a general discussion see D. Harland, "Products Liability and International Trade Law" (1977) 8 Sydney L. Rev. 358; J. Goldring, "Liability of Manufacturers for Defective Goods: Some European Trends" (1977) 51 L. Inst. J. 240; J. Goldring, "European Products Liability Law—a Postscript" (1977) 51 L. Inst. J. 403; N.S.W. Law Reform Commission Working Paper: Sale of Goods: Warranties Remedies Frustration and Other Matters (1975); Ontario Law Reform Commission: Report on Consumer Warranties and Guarantees in the Sale of Goods (1972); (Swanson Committee) Report of Committee to Review the Trade Practices Act 1974 (Cth) (1976).

which strengthen the rights of consumers.³ Both the common law and legislative expansion of manufacturers' liability have generated analysis of and at times polemical debate about, the policy underpinning the "new" law. This debate has hardly arisen in Australia,⁴ despite the fact that local legislation has increased considerably the liability of manufacturers: Manufacturers Warranties Act 1974 (S.A.); Law Reform (Manufacturers Warranties) Ordinance 1975 (A.C.T.) and Division 2A of Part V of the Trade Practices Act 1974 (Cth), introduced in 1979. This article surveys the work of lawyers and economists who have examined the economic implications of consumer protection laws in order to provide a theoretical framework for examining the policy underlying this new strict liability.

From the outset it is important to ask why any new regime is required. To answer this question, it is necessary to see how the law hitherto has imposed liability, and to assess why such arrangements have proven unsatisfactory and how they may be improved. This immediately raises the matter of value judgment. To postulate that there is a "better" arrangement requires that the standards by which these are judged be stated. However, an economic analysis of legal institutions refrains from such value judgments. In using the expressions "good" or "better", economic analysis confines itself to a utilitarian or instrumental discussion: something is "good" if it is conducive to, or brings about, the maximum satisfaction. Peoples' wants are accepted as valid without passing judgments upon them, and legal institutions are assessed in terms of how they satisfy such wants. However, as these wants occur in a universe of limited resources, economic analysis assesses a solution not merely by how wants are satisfied, but also by how much this costs in terms of consuming other resources. Thus, if law A and law B yielded the same degree of satisfaction but law A consumed fewer resources, it would be the "better" law.

1. The Goals in a Liability Structure

In discussing the legal system in economic terms, we are not concerned with maximising the interests of any one individual but with collective welfare. This raises the problem of identification of diverse interests and their aggregation. One solution for maximising the welfare of each person is to leave this to the workings of the market. Although

³ E.g., Consumer Product Safety Act 1972 (U.S.A.), Pub. L. No. 92-573; Federal Trade Commission Magnuson-Moss Warranty Improvement Act 1975 (U.S.A.), Pub. L. No. 93-637.

⁴ For a discussion of the issues in Australia see J. Levine, "Economics and Consumer Protection: A Plea to Lawyers" (unpublished)—a paper delivered to Canberra Law Workshop, October 1977; "What Price Intervention? Government and the Economy" (unpublished)—papers presented at a conference conducted by the Centre for Independent Studies, April 1978 especially E. Sieper, "Consumer Protection—Boon or Bane" and R. Parish, "Industrial Censorship"; A. Dickey and P. Ward, "Consumer Legislation in Socio-Economic Perspective: Observations from the Enactments of One State" (1977) 13 U.W.A.L. Rev. 378.

the theoretical implications of this are considered below, the writer does not offer this as an available practicable solution. (This approach would render much of the law unnecessary, because if individuals were to desire the rights, privileges and immunities—which the law presently confers upon them—they would establish these through private contracts.) The more practicable approach is to enquire why the law has chosen to impose liability ("assign liability") on a particular person and whether a "better" alternative regime of liability exists.

In the area of defective products three reasons for liability assignment emerge. First, to satisfy or compensate losses in order to accord with an ethical premise that "innocent" people should not suffer through the fault or misconduct⁵ of another. Secondly, to prevent or minimise the incidence of loss both to the individual and to the community through waste of resources. Thirdly, to make the risk of injury inherent in any goal explicit in the price paid, so that avoidance measures may be taken, either by the producer (for example, by modifying design or publishing warnings) or by the consumer (for example, by altering his behaviour). The achievement of any or all of these goals involves some cost to the individual to whom liability is assigned. It is necessary to distinguish whether a new regime merely re-allocates the incidence of existing costs or generates new costs (or savings). This question will be considered separately. However, at this stage it should be noted that the above goals may be achieved through a variety of regimes:⁶

(a) caveat emptor ("let the buyer beware"), the buyer would make individual contractual arrangements with the seller, or manufacturer, or insurer;

(b) no civil remedy, but regulation of manufacturers or suppliers through criminal law;

- (c) remedy for the injured user but not purchaser, based on some sort of delictual principal (similar to the present tort situation);
- (d) remedy for purchaser under contract with seller, but no remedy for the user (present contractual situation);
- (e) remedy for both purchaser and user under a regime of strict liability;
- (f) remedy by purchaser or user against an insurance fund;
- (g) remedy for any person against an insurance fund.

These regimes are not exhaustive nor, for the most part, mutually exclusive. For example, outright regulation of product standards through criminal law has been rare. There has been some exception with respect to commodities such as food and drink, and although the Trade Practices

⁶ Borrowed with modification from B. Merilees and N. Cotman, "An Economic Analysis of Consumer Protection Law" (1976) 48 Aust. Quarterly (No. 1) 79.

⁵ Negligence has now shed much of its connotation of moral blameworthiness and stands as an instrument of ex post facto allocation of accident costs. J. Fleming, "An Evaluation of the Fault Concept" (1965) 32 Tenn. L. Rev. 394; A. Ehrenzweig, "Negligence Without Fault" (reprinted) (1966) 54 Calif. L. Rev. 1422; P. Atiyah, Accidents, Compensation and the Law (2nd ed. 1975) Ch. 19.

Act provides for the prescription of product safety and information standards (sections 62, 63 and 63AA), these sections and their related prescriptive powers have seen little use. Compulsory third party insurance (akin to a remedy by the purchaser against an insurance fund) in motor accidents, ensures recovery of damages provided that negligence is proved. These regimes tend to supplement rather than replace the common law. The compensation, protection and loss avoidance functions to the extent to which they are performed at all by the law, lie principally in the domain of tort and contract. This is particularly so in the case of defective goods. Any critique of these regimes must identify the function expected of each regime and assess its performance. It is assumed that the functions nominated above are desired by the community. It is further assumed that the community expects them to be performed by the law, although strictly speaking this assumption is invalid: theoretically matters such as safety, loss avoidance and risk minimisation could be left to market forces, that is, they could be "bought" separately from the goods (i.e. prices depending upon different grades of safety, loss avoidance and risk minimisation). Finally, it is assumed that persons who suffer loss and who litigate to vindicate their individual interests, may be divided into three classes: immediate buyers; persons who derive possession from buyers; and third party non-users or bystanders. (While the discussion concerns private law remedies, it should be noted that collective losses are not recovered directly: such losses include use of publicly funded amenities, for example, hospitals, fire brigade and general losses of resources or output.) As a result of the doctrine of privity, contractual remedies generally are available only to immediate buyers, while tort remedies generally are available to all three groups.

The type of loss or injury which is compensated may be divided, pragmatically, into death or bodily injury; physical damage to property (for example, by explosion or leakage); and consequential economic loss (including damage to the product itself, losses flowing from product failure such as loss of profits and expectation). Such pigeon-holing of injuries accords with practice but does not stand theoretical scrutiny. For example, a dependency action in tort in respect of death compensates an economic loss, but courts have treated it as something akin to personal injury and distinct from consequential economic loss. The common law concept of damage is grounded on ethical premises, since the law developed rules to recognise the interest to be compensated and rules of remoteness to govern the extent of that interest.

2. Liability at Common Law

Liability in tort is premised on the finding of a breach of a duty of care owed to the plaintiff.⁷ The manufacturer of a defective product is

⁷ For a recent discussion see J. Goldring and M. Richardson, "Liability of Manufacturers for Defective Goods" (1977) 51 A.L.J. 127; H. Luntz, "Consumer

liable to those persons whom it can foresee as being injured8 where it did not act reasonably in avoiding or preventing foreseeable injury. This liability may be avoided by showing that reasonable steps were taken to avoid the presence of defects: for example, in Daniels v. R. White & Sons Ltd9 the manufacturer escaped liability in respect of its contaminated lemonade by showing that it had instigated a "fool proof" system of manufacture aimed at avoiding such contamination. The Court held that the manufacturer had taken such steps as were sufficient and which a reasonable manufacturer would take. Liability is not strict in the sense that the mere presence of a defect without proof of negligence is insufficient to establish liability. By contrast to the Anglo-Australian position, tort law in the United States has dispensed with the need to show negligence and imposes strict liability for injury shown to have been caused by a defective product.10 While the plaintiff is still faced with the difficulty of showing defectiveness and causation, he is freed of the need to show how the defendant had departed from the conduct to be expected of a reasonable manufacturer. Liability in negligence is limited by the principle of remoteness of damage which limits compensation to injury which is "reasonably foreseeable" and therefore, not "too remote". The practical effect of this has been to limit the kinds of claims which will be met in tort. Thus, while the duty of care is owed, generally speaking, all foreseeable plaintiffs (embracing the three classes of loss sufferers delineated above), some types of injury may be "unforeseeable" or "too remote". Until recently, it safely could be said that consequential economic loss was "too remote": however, recent decisions11 have expanded this liability although the new contours are still unclear.12

The sellers' duty in contract is, of course, strict in that defectiveness alone without "fault" attracts liability (assuming that there is a term promising freedom from defectiveness in the contract, for example, an implied condition of merchantability). Liability can only arise if there is a contractual relationship, so the remedy is available only to actual buyers (a class delineated above). Contract has its own test of remote-

Protection Through Tort Law" (unpublished)—a paper delivered to Canberra Law Workshop, October 1977; J. Fleming, Law of Torts (5th ed. 1977) Ch. 23; C. Miller and P. Lovell, Product Liability (Part II) (1977); S. Waddams, Products Liability (1974).

⁸ Donoghue v. Stevenson [1932] A.C. 562. The classical "neighbour principle" is formulated by Lord Atkin, Donoghue v. Stevenson supra, 580. The scope of foreseeability is very wide, for example see Dorset Yacht Co. Ltd v. Home Office [1970] A.C. 1004.

^{9 [1938] 4} All E.R. 258.

¹⁰ American Law Institute, Restatement (Second) of Torts, s. 402A.

¹¹ Caltex Oil v. The "Willemstad" (1976) 11 A.L.R. 227; Anns v. Merton London Borough Council [1978] A.C. 728, 759-760.

¹² For a discussion see H. Glass, "Duty to Avoid Economic Loss" (1977) 51 A.L.J. 372.

ness of damages which is based on the notion that mutually contemplated obligation imports mutually contemplated liability. Thus, the extent of damages depends on the extent of the contract breaker's knowledge of the plaintiff's circumstances. Accordingly, the award of damages for consequential economic loss presents no problem in contract provided, of course, that the defendant was appraised of the possibility of such loss resulting from the breach.

3. Sellers' Liability

The common law assigns liability for defective products through the vehicle of negligence. It also enforces the contractual obligation of the seller. Originally courts implied conditions of title, merchantability, fitness for purpose and correspondence with description and sample, into the contract of sale, unless these were expressly excluded. In the 1970's consumer protection legislation entrenched these conditions in consumer contracts by denying effect to any stipulation purporting to exclude them, (for example, section 68 of the Trade Practices Act and section 64(1) of the Sale of Goods Act 1924 (N.S.W.). The recently enacted Division 2A of Part V of the Trade Practices Act now imposes a hybrid duty on the manufacturer: the manufacturers' duty to the consumer is expressed in a delictual fashion but is strict and based on Sale of Goods Act concepts. (A defence is available in some instances where breach of duty is due to circumstances beyond the manufacturer's control.) Thus, the manufacturer now "gives" the same type of warranties, mutatis mutandis, as the seller under the Sale of Goods Act.14

¹³ Traditionally, the test of remoteness is expressed as two rules, one dealing with general damages and the other with special damages: Hadley v. Baxendale (1954) 9 Exch. 341; 156 E.R. 145. However, Atkin L.J. has convincingly telescoped these into one: Victoria Laundry (Windsor) v. Newman Industries Ltd [1949] 2 K.B. 528, 539. The difference between contractual and tortious damages was discussed in Koufos v. Czarnikow Ltd [1969] 1 A.C. 350, 385-387 (per Lord Reid), 413-414 (per Lord Pearce) and 422 (per Lord Upjohn); A. Guest, Anson's Law of Contract (24th ed. 1975) 534 ff.; H. Parsons (Livestock) Ltd v. Uttley Ingham & Co. Ltd [1978] 1 All E.R. 525. For an application of two measures in a products liability case see Vacwell Engineering Ltd v. B.D.H. Chemicals Ltd [1971] 1 Q.B. 88. See generally R. Cook, "Remoteness of Damages and Judicial Discretion" (1978) 37 Camb. L.J. 288; J. Barton, "The Economic Basis for Damages for Breach of Contract" (1972) 1 J. Legal Studies 277.

Breach of Contract" (1972) 1 J. Legal Studies 277.

14 Manufacturers' "parallel" liability under the Trade Practices Act 1974 (Cth) is s. 74B—liability for failure of goods to be fit for the buyer's purpose; s. 74C—liability for non-correspondence with description; s. 74D—liability for unmerchantable goods; and s. 74E—liability for non-correspondence with sample. Additionally, the manufacturer is liable under s. 74G for non-compliance with an express warranty (defined in s. 74A); is under an obligation to make provision for parts and repair facilities (s. 74F); and is under an obligation in certain circumstances to indemnify the seller (s. 74H). Significantly, while in the main the manufacturers' liability under Division 2A of Part V is confined to "consumer goods" (s. 74A(2)(a)), the liability to indemnify the seller is not so confined (s. 74H(a) and (b)). However, the scope of liability is confined (s. 74L). The "parallel actions" cannot duplicate precisely the sellers' obligations as in each instance of an implied condition, there is some circumstance or some communication inter partes which colours the transaction as between buyer and seller.

However, the seller remains under compulsory liability, under both the Trade Practices Act and the Sale of Goods Act.

By entrenching implied conditions in consumer contracts the law effectively has visited the sins of the manufacturer upon the intermediate seller who would not necessarily have the benefit of a similar implied condition in his own contract with the manufacturer (or anterior seller). This is because entrenching provisions such as section 68 of the Trade Practices Act operate by reference to contracts with "consumers". These shortcomings are remedied in part by the newly imposed duty on the manufacturer to indemnify a seller, found in section 74H of the Trade Practices Act, and an existing provision in section 64(5) of the Sale of Goods Act, empowering a court to join a manufacturer as a party in proceedings by a consumer against a seller in respect of goods which prove unmerchantable. Given the developments in sellers' liability, it seems rational to burden the manufacturer with the same liability as the seller. 16

4. Manufacturers' Liability

However, the question of the appropriate extent of manufacturers' liability is wider than ensuring an indemnity for the intervening seller. If broad policy issues, about who should be liable and why, are ignored then resulting reforms tend to be piecemeal and unsatisfactory. Thus, while the legislature has virtually abrogated the requirement of privity between manufacturer and buyer, it excludes some loss sufferers who lack connection with the chain of sales commencing with the sale by the manufacturer. True, a late amendment to the Bill, introducing Division 2A of Part V of the Trade Practices Act, has widened the class of persons to whom the manufacturer owes a duty to furnish merchantable goods. Section 74D(1)(d) provides that a consumer-buyer or a person who derives title to defective goods through or under such buyer, has an action against the manufacturer. But persons without title (for example, borrowers) or third parties (for example, bystanders) lack the advantage of strict liability. Yet, there is no apparent policy reason for this. Additionally, the contractual antecedents of the parallel liability (sections 74B to 74E of the Trade Practices Act) colour, but do not resolve some technical issues on which the Trade Practices Act is silent:17 for example, what is the appropriate measure of damages and what is the correct test of remoteness?

In policy terms, manufacturers' strict liability may seem a superior

¹⁵ As defined in the particular Act; e.g. Trade Practices Act 1974 (Cth) s. 4B; Sale of Goods Act 1923 (N.S.W.) s. 62.

¹⁶ Swanson Committee Report, note 1 supra, paras 9.120-9.127.

¹⁷ D. Harland, "Manufacturers Liability" (unpublished)—a paper presented to a seminar on Consumer Protection and Consumer Transaction at Macquarie University, September 1978, 21; S. Galitsky, "Beyond Consumer Protection—Section 52 of the Trade Practices Act: Implication of Some Recent Cases" (1979) 7 A.B.L.R. 265, 269-270, 278.

regime to the previously prevailing compulsory seller liability plus negligence. To say, however, that the imposition of strict manufacturers' liability is an improvement on compulsory strict sellers' liability, does not mean that the new system necessarily represents the best arrangement of liability. The entire trend away from caveat emptor and nineteenth century laissez-faire philosophy has resulted in the imposition of costs upon the seller and, more recently, upon the producer. It will be recalled that in 1842, almost 90 years before Lord Atkin formulated his celebrated "neighbour" principle as the basis for the duty of care, Baron Alderson speaking in Winterbottom v. Wright warned of the dire consequences of giving the plaintiff before him (an injured coach driver) the right to recover damages against the owner of a coach let for hire:

If we were to hold that the plaintiff could sue in such a case, there is no point at which such actions would stop. The only safe rule is to confine the right to recover to those who enter into the contract: if we go one step beyond that, there is no reason why we should not go fifty. The only real argument in favour of the action is, that this is a case of hardship; but that might have been obviated, if the plaintiff had made himself party to the contract.¹⁸

(It might be pointed out that this proposal was hardly practicable: the post office hired the coaches from the defendant and then employed a contractor to drive the coach. This latter contractor had employed the hapless plaintiff.) The decision represents the high watermark of laissez-faire thinking under which each individual was left to arrange his own level of protection. When this article turns to consider the theoretical question of abrogation of most private law (in favour of privately arranged bargaining for rights) it should be recalled that the discussion is not altogether fantastic: nineteenth century law approached this position.

Laissez-faire jurisprudence fulfilled the task of insulating enterprises from the costs of product failure and assisting in capital formation. However, the results were found to be socially unsatisfactory and the common law responded in a number of ways: the tort of negligence emerged on the one hand, while on the other, the process of formulating contract law and interpreting contracts resulted in the accrual of more rights to the purchaser. The economic implication is to shift the immediate cost of product malfunction on to the seller or producer. The assignment of liability as in Winterbottom v. Wright imposed costs on the user. Donoghue v. Stevenson²⁰ put the cost on to the producer.

¹⁸ (1842) 10 M. & W. 109, 115; 152 E.R. 402, 405.

¹⁹ P. Atiyah, An Introduction to the Law of Contract (2nd ed. 1971) 11 ff.; R. Cranston, Consumers and the Law (1978) 68 ff.; G. Gilmore, "Products Liability: A Commentary" (1970) 38 U. Chi. L. Rev. 103; G. Gilmore, Death of Contract (1974).

²⁰ Note 8 supra.

When the law inhibits the declaimer of liability, it prevents the re-assignment of cost. Assignment of liability thus is an assignment of costs. If the probability of malfunction is known, then the risk is clear and the cost of the liability is quantifiable. (In practice, although precise risks are not known, they are reflected in the cost of insurance cover.)

5. Assignment of Liability is Unavoidable

Product malfunction produces certain costs in the form of personal injury, property damages, and loss of production among other things. The losses may then be passed on by the legal system, depending on how that system assigns liability. If it does not assign any liability the loss lies where it falls: in an economic sense the liability is "assigned" to the injury-sufferers. At this stage all we are considering is the allocation of an existing loss, that is, one which arises irrespective of the legal regime. For instance, a badly tanned watchband which gives the wearer dermatitis, causes that wearer to suffer a loss irrespective of whether he may recoup against the seller or manufacturer.21 We may have some societal preference as to how losses are allocated; our notions of justice or morality may lead us to prefer one allocation to another. But re-allocation is not the same as creating a new cost, in the sense of requiring the using of extra resources. However, the allocation of liability may itself have a long-term effect on how people behave and how they use resources, which in turn will have implications in terms of cost to the community or social cost. The term "cost" needs to be understood in its economic sense: as resources (be they time, materials or human energies) are in short supply, the use of a resource for one purpose means that it is not available for some other purpose. Thus, in economic terms the cost of that resource is the foregoing of the opportunity to use it for an alternative use. The price of the resource is its next best alternative use. Money need not enter this discussion as it is merely a method of claiming a resource.22 Thus, returning to the question of liability assignment, the immediate cost of the legal liability is certainly felt by the individual actors (for example, as a result of Donoghue v. Stevenson the manufacturer's insurance bill increased, while the cost to the user decreased), but the initial social effect is one of re-allocation.

In the absence of legal assignment of liability an uninsured consumer would bear a notional cost because of the risk of injury. But apart from allocation of costs due to product failure, there may be social costs (and at times savings) flowing from the operation of the legal system itself. Such "secondary" costs would arise where liability is not assigned to

²¹ This point is forcefully made, for instance, in the conclusion to the Report of the Ontario Law Reform Commission, note 1 *supra*, 168. However, the Report did not examine the problem of secondary effects on long term resource allocation.

²² R. Posner, Economic Analysis of Law (2nd ed. 1977) 6.

the person with comparative advantage²³ in avoiding losses; where the regime reduces "consumer carefulness"; where the imposition of costs alters the pattern of resource allocation or causes more resources to be consumed in order to avoid liability; and where a regime reduces the range of consumer choice (for example, where a product is no longer produced). There may, of course, be off-setting benefits, for example, savings in terms of consumer's inspection time and effort, diminution of certain sorts of accidents, and savings in not having to negotiate individual protective cover. Additionally, there may be economies of scale if manufacturers negotiated insurance cover, in place of every would-be consumer.

As noted above, there may be a "cost" even though it is not translated into monetary terms, for example, if some product lines are discontinued. When the law imposes liability and prevents its re-assignment, this reduces the choices open to individuals. It prevents a person from taking a risk. It very often means that a buyer is obliged to pay a higher price for the good because he is buying both the good itself and insurance cover. This is not universally true as the seller's ability to pass on the cost of the liability is governed by the conditions prevailing in the market. The individual buyer may be offended by the loss of the freedom to bear the risk, or worse-off in a pecuniary sense, if the charge made by the seller in respect of insurance cover is more expensive than selfinsurance. The extreme libertarian would complain because of the invasion of his freedom per se, and such a complaint would be unanswerable. Questions as to whether or not a liability regime makes one worseoff, can be answered by considering the costs as against off-setting benefits. In considering the costs of any legal regime, it is important to distinguish the allocation of costs arising because of the mishap, from the social cost resulting from the operation of the law. To say that a consumer is worse-off because he pays for the manufacturer's (or seller's) insurance cover, ignores the fact that in the absence of liability assignment to either of these, the consumer bears the risk and thus, a notional cost (that is, liability by default is assigned to him). Similarly, to speak polemically about invasion of rights, or expropriation of

²³ The principle of comparative advantage (also called comparative cost) originated with David Ricardo, who used it to show the mutual advantage in specialisation and trade where two (or more) individuals can produce the same sort of goods but experience a difference in the comparative cost of production. If two individuals each can produce the same two goods but at different costs, they can expand their joint output if each specialises in the output which he can produce more efficiently (i.e. with smaller call on his resources) and use the surplus output for trade with the other. R. McKean, "Products Liability: Trends and Implications" (1970) 38 U. Chi. L. Rev. 3, 25 ff. employs an arithmetic example to illustrate this. Trade would be mutually advantageous even if one individual had absolute advantage in both outputs. Assume that a highly regarded Q.C. is a better typist than any secretary he can employ; he has an absolute advantage over his secretary both in law and typing. However, he has a comparative advantage in law, so he specialises and employs (trades part of his surplus with) his secretary.

property is question begging: in a legal sense rights or property exist only when the legal system chooses to recognise them. To say that imposing a liability on the manufacturer invades his property rights is just as meaningful (or meaningless) as saying that caveat emptor invades the buyer's property rights.24 The real question is, whose interests (a neutral word) has the law chosen to recognise?

The law expresses certain values which are not "economic". The contribution of economic analysis is to comment upon how the law effects its purposes. For example, if one of the aims of the law is to compensate certain losses, the economist can comment upon the efficacy of any regime, its efficiency and its consequences. As noted previously, the law recognises certain interests as worthy of compensation, it provides the measure of damages and tests of remoteness. Implicit in these rules are certain value choices which may mean that in certain circumstances legal compensation is not the same as compensation through the market.

As the assignment of liability does affect the allocation of resources through the process of production and exchange, economic analysis looks to whether a particular regime achieves the optimal or most efficient allocation of resources. "Efficiency", however, presents its own problems. The economist using this word is dealing with two concepts: one has to do with maximising output with the least sacrifice of resources, while the other has to do with maximising subjective satisfaction.25 As Ghosh, Lees and Seal observed,26 most non-Marxist economists eschew judgments of individual welfare and treat it as an uniquely subjective thing which can only be determined by the individual. McKean defines the two concepts thus:

[T]here are two related but not identical concepts of efficiency— "economic efficiency", in which no output can be expanded without reducing some other output, and "Pareto optimality"-particular efficient points to which voluntary exchange would lead, and at which no person can be made better off (as he himself sees his well-being) without making someone else worse off (as he himself sees his well-being).27

McKean demonstrates that under certain theoretical conditions, caveat

²⁴ T. Cowan, "Some Policy Bases of Products Liability" (1965) 17 Stan. L. Rev. 1077, 1087-1088 discussing "expropriation of a certain valuable interest of the consumer".

consumer".

25 R. McKean, note 23 supra, 30.

26 D. Ghosh, D. Lees and W. Seal, The Economics of Personal Injury (1976) 41.

27 R. McKean, note 23 supra, 30. This is McKean's nomenclature which is not universally followed: e.g. T. Scitovsky, Welfare and Competition: The Economics of a Fully Employed Economy (1952) 149 and 179, uses other terms—"technological efficiency" and "economic efficiency"; S. Nath, A Reappraisal of Welfare Economics (1969) 152. The various meanings of "efficiency" are provided by S. Stiegeler and G. Thomas, A Dictionary of Economics and Commerce (1976) 116. persolv, "efficiency" "efficiency" "efficiency" "efficiency" in production" "efficiency in distribution" and 116, namely, "efficiency", "efficiency in production", "efficiency in distribution" and "allocative efficiency".

emptor leads to efficiency in both senses. This is because individuals will trade in "accident prevention" and assume those risks with which they can cope most economically. The aim of this analysis is to show the implications of departing from caveat emptor rather than advocating a return to it. McKean does not deal with Paretian optimality either as a theoretical construct28 or with its utility as a tool of applied policy.29

II ALTERNATIVE SCHEMES OF LIABILITY

This article advances policy arguments in favour of strict manufacturers' liability, not by reference to a formal model but rather by means of evaluating alternatives. Thus, McKean's demonstration (considered below) is not conclusive because of its dependence upon assumptions which cannot be satisfied in practice. This article pursues the inquiry suggested by McKean in order to explore the social cost implications of law-imposed liability. It adopts within the private law framework, the arguments of Calabresi and Bass³⁰ which favour the use of liability assignment as an instrument of deterrence. The article traverses fertile ground for societal value judgments and polemics, and no solution can be advanced without reference to individual value judgments. Recourse to economic analysis should not be taken as providing objective and irrefutable rules. As Posner warns, "[t]he economist's competence in discussion of the legal system is strictly limited. He can predict the effect of legal rules and arrangements on value and efficiency, in their strict technical senses, and on the existing distribution of income and wealth. He cannot prescribe social change".31

1. Why Should the Law Assign Liability at All?

Generally, the liability assignment function of the law may be queried systematically to see whether the rights, privileges and immunities conferred by a particular law might not be obtained in a less costly way. Thus, for example the individual could (if it were worth his while) purchase a promise from other people around him to respect the kinds of interests protected by the law of tort. If a person wished to have an interest in land, analogous to what is recognised presently as a proprietorial interest, he would protect the "property" in a given plot of land by paying the neighbours not to take it, not to make physical incursion on it ("trespass") and even to permit assignment of these contractual rights to others. The civil law under such a regime would consist of a minimal law of contract with ancillary

²⁸ D. Winch, Analytical Welfare Economics (1971) 77 ff. especially 83.

²⁹ Id., 177 ff. and Ch. 10 generally; R. Armey, Price Theory: A Policy-Welfare Approach (1977) 157 ff.

³⁰ G. Calabresi and K. Bass, "Right Approach, Wrong Implications: A Critique of McKean on Products Liability" (1970) 38 U. Chi. L. Rev. 74.
31 R. Posner, note 22 supra, 10; I. Little, A Critique of Welfare Economics (2nd

ed. 1957) 67.

enforcement procedures. The cost of making all of these bargains ("transaction cost"), of course, would be prohibitive, as would the cost of recording, maintaining and supervising these rights. The law operates so as to assign rights but parties might bargain (if legally permitted) to re-allocate their rights or privileges or immunities if the ultimate result is mutually more satisfactory.

2. The Coase Theorem

Coase³² has demonstrated that in the absence of "transaction costs" the initial assignment of rights is immaterial to the re-allocation which will occur in a smoothly working price system in conditions of perfect competition. The demonstration is based on the proposition that if the process of exchange is uninhibited, resources will gravitate to their highest valued use. Coase has demonstrated the symmetry of cost by showing that when A offers to pay compensation for making some incursion upon B's right, B is confronted with a cost if he chooses to insist upon his right. In other words, the exercise of the right costs B the opportunity of receiving a payment. For example, under existing law, if A, a cattle raiser, wishes to increase his stock, then he will have to pay B, a neighbouring grain grower, for the increase in damage caused by the occasional straying beast. If A operates in conditions of perfect competition there is inducement by market forces, to increase output until marginal revenue from sales equals marginal cost of production (and price will equal marginal cost); and the cost of compensation (for example, the repairing of fences) will simply be another cost of production. (While A's cost of production would be lower were it not for the law of trespass, his liberty of letting the cattle trample on B's crops would add to B's production costs.) B might reject the compensation if his return from the grain which is trampled on would be greater than the compensation: if the revenue attributable to the trampled grain is less than the compensation, then B will take the latter. In either case the assertion of B's legal right involves a cost—because someone is willing to "buy" it from him. All other things being equal,

³² R. Coase, "The Problem of Social Cost" (1960) 3 J. L. & Econ. 1. For a general formulation see G. Nutter, "The Coase Theorem on Social Cost: A Footnote" (1968) 11 J. L. & Econ. 503. There is some controversy as to whether the Coase theorem operates in the long-run. Calabresi, note 33 infra, now accepts that it does, as do the majority of commentators. However, for further discussion see H. Demsetz, "When Does the Rule of Liability Matter" (1972) 1 J. Legal Studies 13. For a discussion of the whole context of legal assignment of rights, see E. Furabotn and S. Pejovich, "Property Rights and Economic Theory: A Survey of Recent Literature" (1972) 10 Journal of Economic Literature 1137. Recently the universal applicability of the Coase theorem has again been questioned. P. Greenwood and C. Ingene in "Uncertain Externalities, Liability Rules and Resource Allocation" (1978) 68 American Economic Review 300 discuss the application of the theorem under conditions of uncertainty to the extent of the externality, and where liability is imposed on a firm controlled by a dominant shareholder or autonomous manager, and dispute the validity of the theorem under these conditions.

the land is used for the highest valued use, with the other lower-value users discontinuing the lower-value use.

Given the assumptions of perfect competition, zero transaction cost and perfect knowledge the Coase theorem may be applied to other legal relationships. The notion of transaction cost is crucial to the understanding and operation of the theorem. Transaction costs are all the costs of effecting a transfer of rights or indeed, of making up rights de novo through striking effective agreements with other people. In the grain grower—cattle raiser example the costs of reaching agreement would not be great, but such costs would increase with the number of agreements which might be made. A multiplicity of agreements arises either where one person makes a number of unilateral agreements or where classes of persons aggregate their respective interest and bargain as a class with individuals or other classes. Of course, the greater the cost of achieving agreement or of aggregating rights, the less the chance that this will be achieved in an open market situation. The structure of a market itself may affect transaction costs (for example, the absence of perfect knowledge would increase the cost of striking an agreement by imposing costs of obtaining information, conducting searches, and so on), and as well, may affect the incentive to bargain. In the grain grower—cattle raiser example, the incentive to strike a bargain was the pursuit of maximum output so that the highest return from the most valued use of land could be achieved. But this could be short circuited if the cattle raiser agreed with his competitors to drop production to raise prices.

Thus, neo-classical economists³³ have argued that high transaction costs together with universally experienced market imperfections require socially created rights and their allocation via the legal system. To some extent the tort system as applied to defective products may be explained in this way: in the situation typified by Winterbottom v. Wright an injured third party realistically could not bargain with the manufacturer of the defective wheel to "bribe" him to take care. (If he lived in a world of free competition and had prescience of his impending injury he might have "bargained" with his employer for extra wages to accept the risk.) Third parties had to be given law-imposed protection. But tort is not discriminating as to whom it protects: it covers all foreseeable plaintiffs—including those who as consumer-buyers "elect" to take a risk. Thus, full-flown caveat emptor would abrogate negligence as well as modern consumer law.

3. Departure from Caveat Emptor

Applying ideal assumptions to the sale of goods situation, consumers

³³ E.g., G. Calabresi, "Transaction Costs, Resource Allocation and Liability Rules—A Comment" (1968) 11 J. L. & Econ. 67; G. Nutter, note 32 supra, 503 ff.; R. Posner, note 22 supra, 35-36.

possessing perfect knowledge will bargain in such a way as to maximise their satisfaction, and the prices of goods of differing quality will reflect accurately the cost of "compensating" for any shortcoming. Thus, goods of inferior quality would command a lower price which would accommodate the cost to the consumer of say, procuring insurance, or acting as his or her own insurer, or simply expending greater effort and caution in using those goods.

The availability of wide consumer choice would allow each output to be produced by those having the comparative advantage in producing it. Taking "accident prevention" as an output, it may be that certain kinds of accidents are avoided more easily by simple precautions on the part of consumers, so that efficiency would be enhanced by allowing consumers, as a class, to bear the risk.34 Each buyer would take as much (or as little) risk as he chose. Rationally, each buyer would assume risk so long as the cost to him was less than the cost he would have to pay the producer to assume or eliminate the risk (that is, to "bribe" the producer to prevent the accident). Given that people have differing abilities in the prevention of accidents, trade-offs would be possible with a specialisation by those individuals with a comparative advantage in "accident prevention". The ordinary process of free trade (we assume no transaction costs) would lead to maximisation of both economic efficiency and subjective satisfaction. As McKean puts it: "If the economy is at an inefficient point, there is an opportunity for a mutually advantageous deal. This will shift each output to whatever producers have a comparative advantage in producing it and thus yield a net increment in total output".35 This amounts to the argument in defence of caveat emptor, and in legal terms not only a rejection of compulsory seller liability and strict liability but also of the remedy in negligence.³⁶ However, if there is anything less than perfect knowledge on the part of consumers caveat emptor would lead not to informed risk-taking but to consumer gambling. Additionally, any market imperfection would raise the transaction cost of "hiring" the manufacturer to produce defect-free goods. It has been noted already that certain loss-sufferers are not buyers. In a world of caveat emptor and costless transactions loss-sufferers could combine and bribe the producer to eliminate such risks which they chose not to bear (that is, a further application of the comparative advantage argument). As such bargaining is impracticable, caveat emptor cannot be implemented by itself. It is important to grasp the significance of "assuming away" the cost of arriving at bargains and the cost of gaining information.

³⁴ For the complete argument see R. McKean, note 23 supra, 32.

³⁵ Id., 28.

³⁶ J. Buchanan, "In Defence of *Caveat Emptor*" (1970) 38 *U. Chi. L. Rev.* 64, 66. Buchanan does not deal with the concept of negligence in any detail, but does concede that in some instances (*e.g.* injuries to third parties) "selective departures" from *caveat emptor* may be required, 71 ff.

As a result of imperfect consumer (and third party bystander) knowledge, and high transaction costs (especially in bargaining between groups), adherents of the market mechanism admit the need for a liability assignment through law. This is provided by the action in negligence, the economic rationale of which is discussed by Posner³⁷ in terms of imposing liability with reference to the probability (risk) and magnitude of loss, and the cost of avoiding it. Briefly, Posner considers that negligence exists where the cost of loss avoidance is less than the cost of compensation multiplied by the probability of the mishap occurring (expressed as a percentage). This is very much an ex post facto mechanism for allocation of accident costs, but even so it is reminiscent of Lord Reid's advice in Wagon Mound (No. 2): "A reasonable man would only neglect such a risk [of small magnitude] if he had some valid reason for doing so, e.g., that it would involve considerable expense to eliminate the risk. He would weigh the risk against the difficulty of eliminating it".38

The concession made in favour of negligence shows the problems inherent in economic model building: underlying the Coase theorem are a number of ideal assumptions, the removal of which deprives the theorem of its axiomatic force. While it is useful to work through the consequences of any given liability regime, comparing its operation with market allocation of liability under ideal conditions, it must be recalled that these cannot be taken for granted in the real world. McKean's analysis considers a range of regimes, which move further and further from caveat emptor.39 The alternatives are said to be first. caveat emptor; sellers' liability; negligence, based on producer liability; strict producer liability for defects; strict producer liability without need to show a defect; and finally, furthest from caveat emptor, taxpayers' liability. It is unnecessary to reproduce the consequence of each regime, except to recall that given the ideal assumption, caveat emptor, yields the most efficient distribution of liability if we ignore values other than efficiency and Pareto optimality. These values include fairness, equality. and the need to protect certain persons (for example, children). Consumers would "hire" the producers to make safer products by expressing their choice in the open market. This would partially overcome the problems of bargaining as between groups. Of course, bystanders (who do not affect the market) would face substantial costs if they were to try to bargain with producers. This is partly compensated by the tort of negligence. In the real world, however, negligence is not confined to bystanders, but extends to all persons who are foreseeable

^{37 &}quot;A Theory of Negligence" (1972) 1 J. Legal Studies 29.
38 Overseas Tankship (U.K.) Ltd v. The Miller Steamship Co. Pty Ltd (Wagon Mound (No. 2)) [1967] 1 A.C. 617, 642.

³⁹ R. McKean, note 23 supra, 43 ff.; see also R. McKean, "Products Liability: Implications of Some Changing Property Rights" (1970) 84 Quarterly J. Econ. 611, 617 ff.

victims of the defendant's acts or omissions, and pre-eminent amongst the foreseeable are consumer-buyers. Thus, historical experience suggests that *caveat emptor* was an inadequate instrument of compensation and loss avoidance. This means that in practical terms, the choice now is whether or not negligence is to be supplemented with further remedies.

McKean's analysis is meant to illustrate the effects of departing from caveat emptor. A shift to negligence reduces "consumer carefulness" thereby increasing social cost (McKean ignores the off-setting effect of the doctrine of contributory negligence). The introduction of liability insurance may induce loss avoidance by producers in an effort to reduce premiums, but the manufacturer's behaviour would depend on how the premium is calculated. If premiums are sensitive to risk they will operate as a marginal tax on unsafe goods and induce loss avoidance. This effect will be less pronounced if the premiums are less sensitive and operate as a lump sum tax.⁴⁰ McKean sees strict liability as intensifying these impacts. It should be noted that in instances where manufacturers lack the comparative advantage in loss avoidance—for example, where producers' inspection costs exceed the cost to consumers in making pre-use inspections—there may be a net increase in social cost.

It seems to the writer that the sensitivity of premiums is of crucial significance: if under strict liability the premium reflects accurately the risk inherent in every good, and is fully included in the price, then insurance will increase social cost if the premium charged to the producer is higher than the self-insurance premium charged to (or notionally borne by) the consumer. If the consumer's premium is equal to the producer's premium, then all that has occurred is that the actual price of the good has made explicit its real cost. (If the consumer's premium is greater than the producer's premium—and this is quite possible because the producer would enjoy economies of scale in effecting insurance—then there could be a net reduction in social cost.) However, there may be a reduction of community welfare (and a rise in social cost) but also a reduction in accidents if certain product lines are discontinued. Also, as noted in the preceding paragraph, social cost may increase if there is no legal incentive for loss avoidance in instances where consumers have comparative advantage.

McKean takes the view that there is a tendency to an increase in social cost from imposed liability. His analysis while identifying potential sources of social costs does not yield unequivocal results which may be given concrete application. All that emerges are statements about the

⁴⁰ R. McKean, note 23 supra, 50 and note 39 supra. McKean relies in part on O. Williamson, D. Olson and A. Ralston, "Externalities, Insurance and Disability Analysis" (1967) 34 Economica 235. See also D. Epple and A. Raviv, "Product Safety: Liability Rules, Market Structure and Imperfect Information" (1978) 68 American Economic Review 80.

tendency of certain things to occur. It seems that in any assignment of liability there may be both costs and benefits, the magnitudes of which would need to be known before a judgment as to efficiency of any regime is made. The Coase theorem is a two-edged sword: it can be used to defend caveat emptor, but equally it can be used against it.

4. Loss of Consumer Choice: Argument for Caveat Emptor

The shift from *caveat emptor* also involves a diminution of consumer choice which Buchanan illustrates with an example:41 he draws a distinction between a pure accident and a probably preventable accident. The distinction being that the former occurs stochastically in a sequence of probability, but the probability distribution cannot be modified by a change of behaviour. While the latter also occurs stochastically in a sequence of probabilities, the probability distribution can be modified by behaviour change. He used the example of two types of coal which both lead occasionally to furnace explosions, but the probability of explosion differs. With Type A the probability of explosion is low, and any explosion is a pure accident; with Type B the probability is higher but the accidents are mostly probably preventable. Type A would command a higher price in a competitive market than Type B, and the difference would be the cost of prevention (so far as this is possible) or compensation. The buyer would make a choice based on the quality —risk that it is prepared to accept. It would seem that if the buyer of Type B could buy insurance cover against all accidents, it would acquire a superior package, 42 so presumably the difference in cost equals the insurance premium for probably preventable accidents only. (However, it is unlikely that such policies would be sold because of problems in verifying claims.)

By imposing some form of strict liability on the coal producer we cause an increase in the price of Type B coal, to equal the price of Type A, thereby reducing the range of consumer choice and the welfare of the risk preferer. (Buchanan observes that a poor consumer would be worse-off, because he assumes them to be risk preferers.) What is to be remembered is that strict liability does not create a new cost, (abstracting from the social cost, the secondary impacts mentioned earlier), its effect being to spread the cost of losses in a different way. It is true that the genuinely calculating risk-preferer is worse-off, but as a matter of real world experience it is doubtful that the consumer (especially the poor consumer) is to be characterised as a "risk-preferer"

⁴¹ J. Buchanan, note 36 supra, 65. See also D. Cayne and M. Trebilcock, "Market Considerations in the Formulation of Consumer Protection Policy" (1973) 23 U. Toronto L.J. 396, 427 who discuss (in the context of credit laws) the problem of "protecting" certain consumers which results in their exclusion from the market place.

⁴² Thus, in a perfect market Type A should sell at a unit price which is less than the price of the same unit of Type B, plus comprehensive accident insurance which covers all accidents whether preventable or not.

rather than a "risk acceptor". Consumers may think themselves better off with the cheap good, but in reality they are worse-off unless they have adopted precautions against injury or have insured themselves. Buchanan is sufficiently concerned by the problem of effective compensation to depart from the rigorous scheme of private choice and caveat emptor, conceding that a limited form of strict liability may be desirable to compensate third parties (for example, bystanders). This is an admission of the deficiency of caveat emptor. As noted, caveat emptor in its extreme form refuses any remedy in tort even to third parties: Winterbottom v. Wright. Ignoring first party plaintiffs (that is, actual buyers who "bargain" for the risk), there is a need for the law to protect third parties.

Negligence, it appears, gives insufficient protection and is an embarrassment to the protagonist of caveat emptor: it is theoretically unnecessary for the consumer-buyer, and necessary but inadequate for the third party, as well as persons deriving the goods from original buyers. Moreover, the things making negligence inadequate (the problems of proof, etc.) are experienced by all plaintiffs, irrespective of their original relationship to the defendant. Additionally, the fact that a remedy in negligence does exist means that the existing law inhibits bargaining about risk. It operates as an instrument of ex post facto allocation of accident losses depending on elaborate forensic reconstruction of pre-accident events.

As far as contractual relationships between buyer and seller are concerned, it is possible to reconcile imposed liability (in the form of implied terms which cannot be displaced) with voluntary acceptance of risk. For example, section 71(1) of the Trade Practices Act implies a condition of merchantability except regarding defects which are

⁴³ A variation on the theme "There ain't no such thing as a free lunch" is "There ain't no such thing as a costless risk". Considerable discussion has arisen in the area of consumer preference and perception of risk. Professor Oi has provided an economic model based on the assumption of full consumer knowledge, where the price paid for risky goods is the "full price", i.e., cost of good plus expected cost of accident damage (or perhaps self insurance). He argues that assignment of liability to the seller need not result in safer products and indeed in some instances may increase production of riskier goods. See W. Oi, "The Economics of Product Safety" (1973) 4 Bell J. Economics and Management Science 3. The assumption of full consumer knowledge is challenged by V. Goldberg, "The Economics of Product Safety and Imperfect Information" (1974) 5 Bell J. Economics and Management Science 683 with a reply by W. Oi, "The Economics of Product Safety: A. Rejoinder" (1974) 5 Bell J. Economics and Management Science 689. Oi's model is restricted by his assumptions. His policy prescription (i.e. to retain caveat emptor but have the Government intervene to produce and disseminate information) would result in the attainment of optimal conditions within the framework of those assumptions. Theoretical issues aside, Goldberg's discussion of the practical difficulties of disseminating information (i.e. what sort of information, when do you give it, how do you compete with promotional advertising?) shows the difficulty of attaining full consumer knowledge.

⁴⁴ J. Buchanan, note 36 supra, 70.

⁴⁵ Note 18 supra.

specifically drawn to the buyer's attention or, in the event that the consumer examines the goods, defects which the examination ought to have revealed. Similarly section 74D(2)(b) in Division 2A of Part V of the Trade Practices Act excludes manufacturer's liability regarding defects drawn to the consumer's attention prior to the making of the contract. Such provision encourages the revelation of defects, allowing the buyer to assess the amount of risk that it will bear.

It goes without saying that the Coase theorem does not apply under a regime of strict liability because the process of assignment is impeded. But similar impediments arise from the operation of factors such as high transaction costs, oligopoly and imperfect consumer knowledge. Under such conditions it is difficult to maintain that Coasian bargains take place, and it is more likely that the consumer accepts risks because he has no real alternative. Buchanan is on firmer ground in analysing commercial transactions involving informed businessmen who have the information to be genuine risk-preferers and the capability to insure or take precautions. The thrust of consumer protection legislation has been to protect the consumer (as defined in the particular legislation), while permitting commercial buyers to forego the protection of implied terms. 47

Allocation of strict liability to the manufacturer would operate to alter the way in which the manufacturer combines resources in the course of production to make "safer" goods—or indeed it may lead him to discontinue a product altogether. Apart from "safer" goods,48 it may encourage loss avoidance in the manufacturing process, or by giving warnings, encourage research and technical break-through, all of which enhance efficiency. What may be predicted is some shift in resource allocation and some diminution of consumer choice. There

⁴⁶ A forceful argument to this effect is to be found in R. Dorfman, "The Economics of Product Liability: A Reaction to McKean" (1970) 38 *U. Chi. L. Rev.* 92, 99; D. Cayne and M. Trebilcock, note 41 *supra*.

⁴⁷ E.g., Sale of Goods Act 1923 (N.S.W.) s. 62; Supply of Goods (Implied Terms) Act 1973 (U.K.) s. 4. However, there is a trend to defining consumer goods by reference to some retail price, e.g., Manufacturers Warranties Act 1974 (S.A.) s. 3 and Trade Practices Act 1974 (Cth) s. 4B inserted by Trade Practices Amendment Act (No. 1) 1977 s. 6. The amending legislation gave rise to the objection from industry that commercial people could not share losses: e.g., K. McGregor, "Protest at Trade Practices Act: Computer Industry 'Shutdown' " 5 July 1977 The Australian Financial Review 1; K. McGregor, "Consumer Warranties: Supplier 'Strike' Widens" 6 July 1977 The Australian Financial Review 1. The Swanson Committee Report, note 1 supra, paras 9.38-9.45 did not anticipate this problem. Objections from industry were overcome in part by the enactment of s. 68A of the Trade Practices Act which allows exclusion clauses (which limit liability for consequential loss) to retain their validity in transactions not involving consumer goods. As regards manufacturers' liability (Part V, Division 2A), it should be noted that s. 74L in some measure confines the scope of a manufacturer's compulsory indemnification of a seller (s. 74H).

⁴⁸ This need not apply in all cases. In Oi's model, note 43 *supra*, it is possible to have riskier goods. See D. Ghosh, D. Lees and W. Seal, note 26 *supra*, 90.

would be no economic incentive for users to be careful, but the deterrence effect of physical injury may be sufficient. In cases where such non-economic deterrence is absent, there will be no incentive for the consumer to alter his behaviour, thus decreasing efficiency.

The discussion has been confined to the simple case of "vertical privity" and if the law were changed so as to create totally new rights by deeming there to be "horizontal privity" between supplier and all users then total cost of manufacture would increase. Again, this increase in direct costs would simply represent a re-allocation of costs presently experienced within society and would amount to a redistribution of income and wealth. The "secondary costs" would be similar to those which have been discussed already. The weakness of the foregoing analysis is the indeterminance which results when the ideal assumptions are removed, particularly the assumption of costless transactions. As Coase has said:

One arrangement of rights may bring about greater value of production than any other. But unless this is the arrangement of rights established by the legal system, the cost of reaching the same result by altering and combining rights through the market may be so great that this optimal arrangement of rights, and the greater value of production, which it will bring, may never be achieved.⁵⁰

The real question is not how the ideal market would allocate liability, but how losses (in the most general sense) caused by defective products can be minimised. Dorfman resorts to a delightful reductio ad absurdum to demonstrate that because a perfect market implies perfect knowledge, including knowledge of defects and potential losses, there is no room in such a market for a law of products liability.⁵¹ In a world of perfect competition caveat emptor is the "appropriate" liability regime, but by definition the question of liability for defective products should never arise. McKean elsewhere⁵² concedes that zero transaction costs do not import zero information costs for the purpose of the caveat emptor model: however, as lack of knowledge is a major source of transaction costs, the model is weakened.

5. Calabresi's Contribution

A different policy approach would accept the functions of law set out at the beginning of this article and would accept that defects are built

⁴⁹ As defined in the N.S.W. Law Reform Commission's Working Paper, note 1 supra, para. 6.26 and note 19: "'Vertical' privity refers to the ultimate (or consumer) buyer's right to recover directly from the manufacturer or other remote seller despite the interposition of wholesaler distributor and retailer, while 'horizontal' privity extends the range of those who can sue the immediate seller or retailer beyond the consumer buyer to members of his family, etc."

⁵⁰ R. Coase, note 32 supra, 16; G. Calabresi, note 33 supra; D. Epple and A. Raviv, note 40 supra, 93.

⁵¹ R. Dorfman, note 46 supra, 95 ff.

⁵² Note 39 supra, note 29.

into a product during its manufacture. It would fashion the law so as to alter the behaviour of the manufacturer. The law need not prescribe one ideal rule of liability allocation, but should seek to impose liability upon the party (for example, as between manufacturer and consumer) who could avoid losses more cheaply—that is, the party with comparative advantage in loss avoidance. If liability is imposed upon such a person (or class of persons), then the avoidance of extra cost is naturally induced—unless that person or class is in a position to pass the cost on to someone else thereby "externalising" the cost. The most sophisticated analysis in this vein is that of Calabresi and Bass. 53 This analysis works through a number of steps aimed at identifying the best loss avoider, commencing with a "rough guess" and proceeding to the elimination of each party involved in the creation of a loss. This process is quite complex because the party with a comparative advantage in loss avoidance may attempt to externalise the cost of his risk, thus avoiding the cost burden and desired incentive to change his behaviour. The complexity of this approach is illustrated by an example: from the universe of "joint causers" of motor car accidents—manufacturers, drivers and pedestrians—if the group is chosen whom we would guess possesses a comparative advantage in accident prevention, then we would be choosing that class which under conditions of free exchange would "produce" and "sell" more avoidance (by way of Coasian bargains). If pedestrians were chosen as the best "loss avoiders" and liability for collisions imposed upon them, this would induce them to behave with greater regard for their own safety (having the desired deterrent effect) and would induce them to insure. If there were no "pedestrian" policies exclusively concerned with motor car collisions, pedestrians would simply purchase accident cover (that is, they would be forced to buy in excess of their needs qua pedestrians) and the premium would not represent the cost of walking but would become a general cost of living. The need to provide reserves to pay compensation would raise the cost of all policies, thereby externalising the costs beyond the party or parties with the postulated comparative advantage. What would happen, is that people who rarely use the roads as pedestrians, but who buy accident cover, would be cross-subsidising pedestrians through having to pay higher premiums.

Calabresi's concern with avoiding externalisation stems from his theory of general deterrence, confining as it does the cost of any activity to participants who generate the cost. As participants must bear these costs they would seek ways to minimise them. This would result in a deterrent effect operating to reduce the sum of accident costs and to free resources which would otherwise be consumed in accidents and associated activities. At a general level, it is not possible to say precisely

⁵³ G. Calabresi and K. Bass, note 30 supra. "Externalisation" is used in this article in the sense used in that article.

how total costs are to be minimised, whether by encouraging quality control or simply reducing or discontinuing the dangerous activity. General deterrence should be contrasted with specific deterrence. In the latter some disincentive deters individuals from a specific act. At this level it is doubtful whether the economic deterrence of the present tort system is really significant when compared to things such as the risk of life and limb or prosecution. The efficacy of general deterrence has been disputed and all that can be said is that the degree of general deterrence will operate in accordance with the nature of the "activity". In the context of any particular activity, one has to find the best or cheapest loss-avoider who is then to be burdened with liability.

The best loss-avoider will vary from situation to situation and from product to product. Calabresi and Bass admit this and examine three examples of physical injury caused by three different products: hepatitis resulting from blood transfusion, allergic reactions to cosmetics, and allergic reactions to drugs. Their analysis leads to the suggestion that efficiency requires in the first instance that liability should be allocated to the hospital or blood bank, in the second to the individual user and in the third to the manufacturer or the individual's physician.⁵⁶ While stressing that these examples are not paradigms of risk allocation

56 As between physicians and manufacturers, the cost advantage should lie with the manufacturer because of the problem of externalisation of the physician's cost through insurance. Again, this is the problem of the practical unavailability of policies for *one* type of risk. (Were such policies available it is doubtful whether in practice they would be taken out, physicians preferring to obtain comprehensive

⁵⁴ The topic of deterrence is rife with "psychologising" and the subject of much debate. Dorfman, note 46 supra, 102 refers to empirical research by Thomas Schelling into response to risk, who concludes that people may alter their behaviour in cases where there is a high risk of small loss; but they do not seem to behave in the same manner when confronted with a tiny risk of enormous loss. Calabresi relies on a notion of general deterrence operating through the cost of a particular loss-creating situation. For example, he suggests that the cost of motor accidents be borne by car drivers: G. Calabresi, "Some Thoughts on Risk Distribution and the Law of Torts" (1961) 70 Yale L.J. 499; "The Decision for Accidents: An Approach to Nonfault Allocation of Costs" (1965) 78 Harv. L. Rev. 713.

⁵⁵ The notion of general deterrence is discounted by a number of writers, e.g. W. Blum and H. Kalven, "Public Law Perspectives on a Private Law Problem—Auto Compensation Plans" (1964) 31 U. Chi. L. Rev. 641, and rejoinders by G. Calabresi, "Faults, Accidents and the Wonderful World of Blum and Kalven" (1965) 75 Yale L.J. 216; W. Blum and H. Kalven, "The Empty Cabinet of Dr Calabresi: Auto Accidents and General Deterrence" (1966) 34 U. Chi. L. Rev. 239. See also P. Atiyah, note 5 supra, Ch. 24. The Report of National Committee of Inquiry on Compensation and Rehabilitation in Australia (Woodhouse Committee) (1974) Parl. Pap. No. 100 explicitly rejected any appreciable specific deterrent effect (paras 117-120) of the present law of tort and implicitly rejected any general deterrent effect, e.g., by calling for enhanced product safety through specific regulation (para. 441) and rejecting differential rates of insurance relative to accident history (in regard to workers compensation see paras 438-439 and 495-497; in regard to motorists see para. 501). The Committee did express some sympathy for the theory of general deterrence (para. 440), but immediately qualified this by saying that it was an empirical problem.

(because comparative advantage is ultimately an empirical matter which cannot be settled upon a priori), they argue that optimal resource allocation does not require the same liability rule in all product accident situations. The only generalisation which they are prepared to make is that individual consumers rarely have the comparative advantage in safety.

It is important to see why consumers may lack this comparative advantage: first, because of their imperfect knowledge of risk either as a function of their own ignorance (used in a non-pejorative sense, as many products incorporate complex technology) or because of false, misleading or simply uninformative advertising; secondly, because so many transactions are a necessary part and parcel of living, not calling ostensibly for a cost-benefit analysis of any one particular transaction (particularly in the case of low cost items); thirdly, because consumers tend to rely on an optimistic assumption of risk; fourthly, the availability of various types of insurance leads to an externalisation of the costs of accidents; and finally, because bouts of legislative activism in consumer protection may falsely reassure the public as to the quality of goods on the market. Even if premiums are so sensitive to the costs of each particular class of loss or accident, the consumer may well be befuddled by the range of choice and fail to buy precisely the sort of insurance which he will require at some time in the future.⁵⁷ This problem arises once the assumption of perfect knowledge is removed as imperfections affect both the consumer and the insurer. High information costs may deter the insurer from marketing policies which cover a particular sub-category of risk. Similarly, the consumer, faced by high information costs, would be hard-put to buy the policy he needs and will need in the future. This need is determined in part by the type of accident or loss that may be encountered having regard to the risk inherent in the goods used. Where is this information to be obtained? Surely the manufacturer is in the best position to know, and at any rate it would be rare for the individual consumer to have the comparative advantage in obtaining information as to safety or loss avoidance. It would seem on a cost-benefit basis that the consumer's research into product safety would not be rewarding unless the initial outlay were large or the expenditure frequent; the consumer normally would make more inquiries when purchasing a motor car than when purchasing a minor household appliance.

cover.) For a recent discussion of the problem of professional liability see H. William Scott Jnr, "Professional Liability Problems in the United States" (1977) 1 Medical Journal of Australia 69 and J. Cripps Q.C., "Comment" (1977) 1 Medical Journal of Australia 73.

⁵⁷ A thorough analysis of the problem of consumer choice is contained in M. Trebilcock, "The Consumer in the Post-Industrial Market Place" in K. Lindgren, H. Mason and B. Gordon, *The Corporation and Australian Society* (1974) 318.

6. Strict Liability

There are five predominant reasons for burdening the manufacturer with strict liability. First, the manufacturer usually would have the comparative advantage in obtaining information; secondly, there would be an incentive to the manufacturer to minimise loss;58 thirdly, if market conditions permit, the consumer is shown and charged the full price of the goods;59 fourthly, in the case of deliberately created risk, where there would be liability in tort, there is actually a saving to both plaintiff and defendant manufacturer—it is not only the plaintiff who faces the cost of proof⁶⁰ and in practice it would seem that the main advantage of strict liability is to facilitate actions which otherwise would have been brought in tort;61 and finally, there would be economies of scale insofar as negotiating insurance is concerned. The difficulty of proving negligence (or indeed, of resisting such action) is illustrated dramatically in Henningsen v. Bloomfield Motor Co.62 where the plaintiff had sought inspection of a large amount of confidential information on each phase of manufacture of the steering assembly.68 This preliminary procedure itself generated an appeal.64

7. Alternative Liability Regimes

As noted,65 there are a range of policy alternatives depending on the combination of delictual, contractual and criminal remedies or models adopted. If it is the concern of the law to provide some form of compensation, then both models based on caveat emptor or criminal sanctions for breaches of the regulated conduct of manufacturers or suppliers are inadequate. Further, remedies in tort or contract provide only limited compensation, the eligibility of the plaintiff depending upon fault in the former and on a contractual nexus in the latter. There are still losses wholly borne by individuals who do not satisfy requirements of eligibility and who are not on the whole the best loss-avoiders.

⁵⁸ See Oi's model, note 43 supra.

⁵⁹ W. Blum and H. Kalven, "The Empty Cabinet of Dr Calabresi: Auto Accidents and General Deterrence" note 55 supra, 248-249.

⁶⁰ T. Cowan, note 24 supra, 1092-1093.

⁶¹ In the U.S.A., where there has been shift from the negligence regime to strict liability so that proof of negligence is not an insurmountable problem, "there is not one case in a hundred in which strict liability would result in recovery where negligence does not". W. Prosser, "The Assault Upon the Citadel (Strict Liability to the Consumer)" (1960) 69 Yale L.J. 1099, 1114. However, as Prosser points out proof that the defect was present when the product left the defendant's hands and that it caused the injury are the plaintiff's main hurdles, not proof of negligence

^{62 32} N.J. 358, 161 A. 2d 69 (1960). This celebrated American case permitted recovery based on breach of warranty of merchantability by a plaintiff who lacked privity with both the manufacturer and the original retailer.

⁶³ Including drawings and charts and a detailed history of all complaints received. 64 It was unnecessary for the plaintiff ultimately to prove negligence as the Court decided the case on the basis of an implied warranty.

⁶⁵ See text following note 6 supra.

Where only the purchaser or user can claim against an insurance fund, there still remains a class of persons who may suffer loss from defective products (for example, bystanders at an accident caused by a defect in a product); so it is necessary to extend coverage to any person suffering some loss, whether user, purchaser or third party. However, both these regimes are "inefficient" in Calabresian terms since they fail to allocate the cost to the best loss avoider or the best "briber" and thus, lack the mechanism necessary to encourage loss avoidance. This could be rectified by marrying potential remedies by the purchaser, user and/or a third party against an insurance fund, with the regulation of the conduct of manufacturers or suppliers using the deterrence of criminal or quasicriminal sanctions in place of market deterrence. However, one cannot say a priori that this combination is more (or less) efficient than other models.⁶⁶

Circumstances prevailing in a particular type of accident situation influence the efficiency outcome of any particular liability regime. For example, in the case of automobile collisions it may be argued that the widespread use of cars renders the concept of general deterrence inapplicable and that strict motorist liability is not the optimal liability regime;⁶⁷ whereas the concept still may be applicable in the realm of product liability.⁶⁸

The question of general deterrence apart, it is clear that a general regime of strict liability may fail, on occasion, to burden the party with comparative advantage in loss avoidance (despite the argument advanced that manufacturers are likely to have the comparative advantage). This is the reason for Calabresi's product by product approach, but this does not yield a general regime. Of course, negligence operates, on a case by case basis, to assign liability on a prospectively determined standard. However, one of the criticisms of tort is that no matter how it is formulated, the "prospective" nature of its standards is very much a myth. ⁶⁹ If liability were no longer to be based on fault but on some test

⁶⁶ The Woodhouse Committee, note 55 supra, was of the opinion that a combination of regulation of manufacturers or suppliers through criminal law with the provision of a remedy for the purchaser or user against an insurance fund and greater consumer education would be superior to any other regime, although this was not closely analysed in the Report. (The bibliography appended to the Report mentioned most of the literature referred to in note 55 supra, but the Committee did not consider these arguments in any detail.)

⁶⁷ W. Blum and H. Kalven, "The Empty Cabinet of Dr Calabresi: Auto Accidents and General Deterrence" note 55 supra, especially 261-265. The social utility of mandatory safety devices also has been questioned: see S. Peltzman, "The Effects of Automobile Safety Regulation" (1975) 83 Journal of Political Economy 677.

⁶⁸ W. Blum and H. Kalven, *id.*, 248-249. This sits oddly with the attitude of these authors to negligence which they see as an acceptable regime of loss allocation and compensation.

⁶⁹ J. Fleming, note 5 supra, especially 397-398; P. Atiyah, note 5 supra, especially 435 ff.; A. Ehrenzweig, note 5 supra; Woodhouse Committee Report, note 55 supra, paras 88-99, 105-112; H. Luntz, Compensation and Rehabilitation

of loss avoidance efficiency⁷⁰ (that is, the defendant failed to exercise his loss avoidance advantage), whether determined prospectively or more likely retrospectively, this would only mean replacing the existing unwieldly tort system with one which would be equally cumbersome. If strict liability is to be introduced, it must be in the form of a general scheme.

This article was confined to arguing the superiority of strict liability over the existing hybrid tort and contract liability. Strict liability would induce greater risk avoidance, regreater certainty and easier conduct of litigation. Even if one adheres to the abstract caveat emptor position as the model regime, it still seems that strict manufacturers' liability is preferable to the recent compulsory sellers' liability. It seems to the writer that personal injury, as a matter of social choice, should be compensated through a no-fault publicly funded social insurance scheme. Ancillary regulation would be required for deterrence.

Discussion of such no-fault schemes⁷² is beyond the scope of this article, but issues which have arisen in the discussion of a liability regime would also arise in an insurance context; for example, loading of premiums of particular classes of persons.⁷³ There would need to be some legal mechanism for compensating losses not covered by the scheme and possibly some ancillary regulating measures to compensate for the absence of economic deterrence.⁷⁴ One real problem, putting a

^{(1975);} H. Luntz, "Consumer Protection Through Tort Law" (unpublished)—a paper delivered to Canberra Law Workshop, October 1977, 4 ff. For a defence of tort see W. Blum and H. Kalven, "Public Law Perspectives on a Private Law Problem—Auto Compensation Plans" note 55 supra.

⁷⁰ Note 37 supra and text accompanying note 37; U.S. v. Carroll Towing Co. 159 F. 2d 169 (2d Cir. 1947).

⁷¹ Note 48 supra.

⁷² E.g., Accident Compensation Act 1972 (N.Z.). See also P. Atiyah, note 5 supra, Ch. 25; Woodhouse Committee Report, note 55 supra.

⁷³ The Woodhouse Committee's terms of reference were limited to inquiring into compensation of victims of accidents and sickness. The Committee rejected the view that it should categorise risk as "a sterile and cumbersome exercise" (para. 496) arguing that it is pointless to regard any industry as an isolated economic unit: "Thus such an essential industry as mining bears a much heavier premium rating than a service industry such as retailing, and the fact that each is an essential component of the general productive effort of the country is ignored. Instead there is a meticulous process of classifying risks and relating premium rates to the answer. Then, in the end, the community pays anyway." On this argument one could logically insist that all losses be covered under such a scheme, but as the Committee was limited by its terms of reference it did not confront this point. The Committee argue in paras 496-497 against the Calabresi-style deterrent model. For a general critique of accident compensation schemes see W. Blum and H. Kalven, "Public Law Perspectives on a Private Law Problem—Auto Compensation Plans" note 55 supra. Calabresi's original model is in "Some Thoughts on Risk Distribution and the Law of Tort" note 54 supra.

⁷⁴ For example see G. Palmer, "Dangerous Products and the Consumer in New Zealand" [1975] N.Z.L.J. 366 for a discussion of the position in that country where personal injury is covered by a social security scheme. Professor Palmer argues that strict liability does not lead to safer products. For a comment on this see J. Gold-

high premium on life and safety, arises where the manufacturer decides that design alteration is more costly than the cost of compensation. This could be handled either through public law regulation or through private law in representative "class actions" or by awarding exemplary damages.75 It is not clear whether such damages would lie in respect of defective products. Courts in the United States have made such awards.76 The English view⁷⁷ is to restrict the availability of exemplary damages, although this view is not accepted in Australia.78 In principle, exemplary damages are available where the tortfeasor makes a calculation as to the profit which can be earned from committing the tort even allowing for damages.79 This may be relevant in the area of product liability. Private enforcement seems an unreliable and socially undesirable way of exacting penalties and this task might best be left to the criminal law.

The benefits of strict liability are twofold: first, it lightens the burden of proof and is more likely to give the consumer redress against an additional (and hopefully solvent) defendant; secondly, it makes it more likely that the risk inherent in a product will be recognised explicitly in the cost of manufacture.80 The efficacy of strict liability as a means of risk reduction would, of course, depend on the sensitivity of insurance premiums. The manufacturer would have some incentive to modify the product or at least to publish warnings and precautions. The cost would be a contraction in the range of consumer choice and possible long-term re-allocation of resources into producing safer and better quality goods.

III CONCLUSION

If policy arguments such as those considered encourage law reform, attention must be paid to the nature of the new liability. This article

ring and M. Richardson, note 7 supra, 141. Palmer argues that given a social security approach to compensation and rehabilitation, there is a need for direct statutory regulation of consumer product safety along the lines of the U.S. Consumer Product Safety Act 1972 (U.S.A.) note 3 supra.

⁷⁵ Although the class action is not known to Australian law, its introduction has been mooted: Australian Law Reform Commission Discussion Paper No. 11 (1979), Access to the Courts-II, Class Actions. Its introduction has been recommended in South Australia: South Australian Law Reform Committee, 36th Report, Relating to Class Actions (1978).

⁷⁶ Rinker v. Ford Motor Co. 567 S.W. 2d 655 (1978); Toole v. Richardson-Merrell Inc. 251 Cal. App. 2d 689, 60 Cal. Rep. 398 (1967) contra Roginsky v. Richardson-Merrell Inc. 378 F. 2d 832 (2d Cir. 1967). The American law is reviewed by D. Owen, "Punitive Damages in Products Liability Litigation" (1976) 74 Mich. L. Rev. 1258. A dramatically large award (\$US128 million) was made in the Ford "Pinto" case: P. Jacobson and J. Barnes, "The Car that Carried Death in the Boot" 27 February 1978-4 March 1978 National Times 39.

⁷⁷ Rookes v. Barnard [1964] A.C. 1129, 1226-1228, 1232-1233. 78 Uren v. John Fairfax Ltd [1966] 117 C.L.R. 118.

⁷⁹ Broome v. Cassell [1972] A.C. 1027, 1114-1119 per Lord Wilberforce.

⁸⁰ R. McKean, note 23 supra.

mentioned at the outset two different, but overlapping, models of liability: contract sine privity and tort. However, each model would debar some loss-sufferers depending on their injury and on their relationship to the chain of production and distribution. Perhaps the time is now ripe for restructuring the whole basis of product liability so that it is no longer merely an appendage to traditional categories of contract and tort, but an independent branch of law embodying a species of strict liability. This system would require its own rules of remoteness (both of plaintiff and of damages) as well as criteria for calculating compensation. Additionally, the type of interests to be protected must be analysed. The commercial touchstone of "merchantability" while surprisingly maleable as a test of community expectation of the level of freedom from defect,81 nonetheless may not be sufficiently sensitive in a number of areas where exceptional and completely unexpected risks arise: for example, in the field of new products, new drugs82 or the use of technology which has not been hitherto consumed by individual members of the public (an Australian example would be nuclear technology). Courts have grappled with the problem by constructing a "hypothetical market" but this may prove unsatisfactory where what is required is really a form of industry liable to ensure either absolute safety or full indemnity. Ultimately, this may require a separate regime for "ultra hazardous goods".83

This article has argued the general case for strict manufacturers' liability, but has not defined the class of persons to benefit nor the scope or extent of such liability. As regards the class of plaintiff, it seems that as there are real advantages in adopting strict liability, the class should be a wide one (akin to negligence). As regards the scope of liability, there may be reasons for permitting limitation: for example, certain

⁸¹ Hardwick Game Farm v. Suffolk Agricultural Poultry Producers Assoc. [1969] 2 A.C. 31, 75-76, 108-109, 117-119; Ashington Piggeries Ltd v. Christopher Hill Ltd [1972] A.C. 441; Cehave N.V. v. Bremer Handelgesellschaft m.b.H. [1975] 3 W.L.R. 447.

⁸² H. Teff and C. Munro, *Thalidomide: The Legal Aftermath* (1976) 45; H. Teff, "Products Liability in the Pharmaceutical Industry at Common Law" (1974) 20 *McGill L.J.* 102, 115, 121; A. Ehrenzweig, note 5 *supra*; R. Traynor, "The Ways and Meanings of Defective Products and Strict Liability" (1965) 32 *Tenn. L. Rev.* 363, 369 ff.

si H. Teff and C. Munro, note 82 supra, 147; U.K. Law Commission No. 82 and Scottish Law Commission No. 45, note 1 supra, paras 48 and 57. The problem of hazardous use of land is not new to the law: see Rylands v. Fletcher (1868) L.R. III H.L. 330. The scope of liability in strict occupiers' liability is limited and excludes claims for consequential economic loss: Cattle v. Stockton Waterworks (1875) 10 L.R.Q.B. 453; Weller v. Foot & Mouth Institute [1966] 1 Q.B. 569, 588. However, the policy basis of such limitations is not clear, particularly in the light of possible catastrophic losses due to nuclear accidents or genetic mutations caused by escaping substances: see the Symposium on "Biotechnology and the Law: Recombinant DNA and the Control of Scientific Research" (1978) 51 So. Calif. L. Rev. 909; J. Friedman, "Health Hazards Associated with Recombinant DNA Technology: Should Congress Impose Liability Without Fault?" (1978) 51 So. Calif. L. Rev. 1355.

types of consequential economic loss might be avoided more conveniently or insured more cheaply, by the user of the product. It thus remains to examine the compensation policies we chose to adopt, so as to determine the interest which such strict liability would protect, and then to effect the appropriate mechanical changes.

The deficiency of Division 2A of Part V of the Trade Practices Act lies in the fact that the new remedies are engrafted upon the existing contractual framework. However, product defects affect people other than those engaging in contractual dealings with the result that some individuals are denied a remedy on the basis of concepts which this very enactment has rendered largely irrelevant. Such a situation is absurd. We have elected to impose liability irrespective of choice: the question now is to formulate rational and functional principles for the allocation of losses rather than the perpetuation of the contractual framework, particularly when its substance well and truly has disappeared.