

The Social Insurance-Deterrence Dilemma of Modern North American Tort Law: A Canadian Perspective on the Liability Insurance Crisis

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INTRODUCTION

This Article will survey trends in the United States and Canadian tort systems and discuss how they have impacted American and Canadian liability insurance markets. A major thesis of this Article is that the changing complexion of the United States tort system, paralleled by similar trends in Canada, explains many of the recent problems in availability, affordability and adequacy of liability insurance. Changes in parameters of liability and quantum of damage have made it increasingly difficult for insurers to price various types of risks. In particular, this Article argues that attempts to pursue deterrence objectives and compensation (social insurance) objectives simultaneously through a single legal instrument — the tort system — entail unresolvable contradictions that have destabilized the system and its associated private insurance arrangements, especially

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with the increasingly widespread espousal of a social insurance objective for the tort system. It further argues that the tort system is incapable of coherently serving this latter objective, and that the adoption of *de facto* or *de jure* regimes of strict liability premised on social insurance (or risk spreading) rationales yields no clear or stable legal equilibrium and has contributed significantly to the current liability insurance crisis. The Article also argues that deterrence or accident-reduction rationales for strict liability generate equally indeterminate outcomes.

The problems of forecasting how courts will resolve the social insurance-deterrence dilemma and how they will identify superior risk bearers or risk spreaders for social insurance purposes are particularly acute with "long-tail" risks. These are risks for which an insurer's exposure may extend perhaps two decades or more beyond the time when the risk being insured against occurs, and perhaps long after the insurance policy at issue has expired.¹ Long-tail risks are not the only problem that insurance markets have difficulty accommodating. Other difficulties will be canvassed in the course of this Article, but long-tail risks represent the most extreme form of uncertainty for insurers in underwriting and pricing risks. Long-tail risks involve substantial technical uncertainties, for example, the likelihood of toxic substances discharging from given storage facilities over time, as well as substantial medical or scientific uncertainties, such as what the form and incidence of health problems are likely to be from given levels of exposure over time. Substantial "socio-legal" uncertainty also exists as to what the legal ground rules are likely to be twenty or thirty years hence in allocating liability for these risks and quantifying losses associated with them.

This last risk is particularly problematic for insurers because it is largely undiversifiable through conventional insurance procedures of pooling similar but uncorrelated or independent risks. Socio-legal risk affects all lines of general liability insurance; all risks are to an important extent dependent on similar socio-legal factors. In this respect, socio-legal risk constitutes a form of "systematic" rather than "unsystematic" risk, which always poses substantial problems of insurability. While this risk might in theory be diversified away through the stock market rather than the insurance market, Winter has shown that where there is a positive net opportunity cost to rais-

1. Prominent examples include: toxic torts such as those involving asbestos, in which the plaintiff's illness or death may follow a latency period of 20 to 30 years from the time of exposure; discharges of toxic chemicals from waste disposal dumps which may contaminate local water or atmospheric conditions after similar latency periods; medical malpractice claims in which birth defects may not fully manifest themselves for many years after birth; other professional negligence claims, such as those against architects or engineers, in which safety defects in structures may not manifest themselves in the form of injuries until many years after the completion of the structures.

ing additional equity, this diversification route is incomplete.² Where severe uncertainty attends insurers' estimation of the probability distribution associated with a given risk and the magnitude of the losses which may accompany the risk, this uncertainty will immediately manifest itself in the repricing of insurance, in restrictions on coverage (higher deductibles, more co-insurance, lower coverage ceilings, exclusions of certain risks, the substitution of claims-made for occurrence-based coverage), and, at the limit, in the complete withdrawal of coverage. This Article points to a number of doctrinal innovations in American and to a lesser extent Canadian tort law that substantially increase insurers' uncertainty in predicting both determination of liability and quantification of damages in particular cases. To the extent that this socio-legal risk cannot be assigned a reasonably reliable, actuarially-based, probability distribution, the distinction emphasized many years ago by Frank Knight³ between risk and uncertainty becomes central to an analysis of the current liability insurance crisis. The thrust of the analysis in this Article is thus very much in the spirit of Knight's distinction between risk and uncertainty.

A major question that this Article attempts to answer is why Canadian liability insurance markets in the last several years have developed many of the same surface characteristics as United States markets in terms of the availability, affordability and adequacy of liability insurance. Many formal features of the Canadian tort system differ sharply from those of the American tort system, often in respects which many United States commentators view as major sources of infirmity in their system. To list a number of the major differences:⁴

1. Canadian tort cases typically are determined by judge alone and not by juries;
2. the contingent fee system for financing plaintiffs' legal costs, which arguably leads both to more speculative actions and inflation of awards by juries sensitive to the net value of awards to plaintiffs, is not widely utilized anywhere in Canada and is prohibited in Ontario;
3. the British cost rule applies in Canada, whereby the loser in a civil suit must compensate the winner for a high proportion of the latter's legal costs, again arguably discouraging speculative suits (this contrasts with the American cost rule whereby each side bears its own costs);

2. R. WINTER, "CRISES" IN COMPETITIVE INSURANCE MARKETS (Working Papers in Economics E-86-74, Hoover Institution, Stanford Univ. Dec. 1986).

3. F. KNIGHT, RISK, UNCERTAINTY AND PROFIT 197-263 (1921).

4. See J.R.S. Prichard, A Systematic Approach to Comparative Law: The Effect of Cost, Fee and Financing Rules on the Development of the Substantive Law (unpublished manuscript on file with the author, 1985).

4. awards for pain and suffering, which are a major component of United States personal injury awards, are subject to a relatively modest judicially-imposed cap of less than \$200,000 in Canada;
5. discount rates employed to convert foregone future income streams to present value terms for purposes of a lump sum award apparently are subject to wide variations in judicial practice in the United States, but at least in Ontario follow a rate standardized by a formal Rule of Court;
6. punitive damages, which can constitute a significant component of damage awards in the United States, are very rarely granted by Canadian courts;
7. the movement from negligence to strict liability in the products liability context in the United States, which has expanded the parameters of liability of manufacturers, has not occurred in most Canadian provinces, including Ontario;
8. United States workers' compensation laws in most cases permit employees to sue third parties (such as manufacturers of defective products) in tort despite their workers' compensation entitlements (many products liability actions in the United States arise in this way, for example, the asbestos litigation), whereas in Ontario most third party actions are legally foreclosed and the employee is confined to his workers' compensation benefits;
9. the rules governing aggregation of individual claims as class actions as entailed in the United States in mass toxic tort claims, such as the asbestos, DES, and Agent Orange litigation, are much more permissive than in Canada where in all provinces, other than Quebec, class actions are subject to severe legal constraints;
10. the U.S. Supreme Court does not hear appeals on matters of purely state law, which includes most aspects of tort law, thus leaving open the potential for substantial diversity of doctrine among the fifty states (and consequent uncertainty for insurers of firms operating in a number of state markets), whereas the Supreme Court of Canada is the ultimate adjudicator of all legal issues, including those of a private law nature, subject of course to the ability of provincial legislatures (not courts) to adopt distinctive legal rules within their own jurisdictions;
11. social security programs in Canada are in many cases more generous and comprehensive than in the United States (for example, universal health care insurance), and thus there is a reduced need to look to the tort system to serve a social insurance function.

Explaining why Canada, or at least Ontario, appears to have undergone a liability insurance crisis with surface similarities to that in the United States, despite these differences between the two tort social security systems, may entail one of several approaches: (i) the explanation for the liability insurance crisis may lie outside the tort system; (ii) despite the formal and functional differences between the two tort systems, the functional similarities may be greater than they appear at first sight; (iii) it is plausible to predict that the formal and functional differences will narrow increasingly in the future and that the insurance industry is weighing this risk heavily, particularly in the case of long-tail risks where socio-legal uncertainty presents a significant non-diversifiable form of risk; or (iv) despite the surface similarities in the insurance crisis, the crisis actually may have been less severe in Canada, reflecting the impact of the existing and predicted future differences between the two tort systems.

This Article argues that all four kinds of explanations have some force but that the last three seem to be the most cogent. The third,

non-diversifiable socio-legal risk, is perhaps the most problematic for current policy makers. In some sense it entails doing nothing and providing credible commitments to private economic agents that nothing will be done in the future to increase significantly socio-legal risk.

Part II of this Article sketches some of the dimensions of the liability insurance crisis in the United States and Canada. Part III sets out and evaluates various explanations that have been offered for the crisis. Part IV reviews statistical evidence of increases in the cost of the tort system in the United States and Canada. Parts V and VI identify and evaluate doctrinal shifts in the United States and Canadian tort systems to which the increasing costs of the systems have been attributed. Finally, Part VII reviews and evaluates various criticisms of the current tort systems.

These critiques operate at different levels. Some are directed at the general presuppositions of tort law as an instrument for achieving both deterrent and compensatory goals. Some are directed at detailed features of existing doctrine that, if remedied, are claimed to be capable of ameliorating at least the most seriously dysfunctional aspects of the present system. Others (typically flowing out of the first strand of criticism) argue for radical displacement of the current tort system by either more stringent forms of regulation of safety hazards or state-run or state-orchestrated forms of administered compensation for accidents and illnesses.

THE DIMENSIONS OF THE LIABILITY INSURANCE CRISIS

The United States

A recent report by the Tort Policy Working Group, an inter-agency working group consisting of representatives at ten agencies and the White House, appointed by the U.S. Attorney General, provides illuminating data on problems of availability, affordability and adequacy of liability insurance for various classes of insurers.⁵

Municipalities have faced premium increases of as much as four hundred percent. Increases of one hundred and two hundred percent have been common, often for policies with lower coverage and higher

5. U.S. DEP'T OF JUSTICE, REPORT OF THE TORT POLICY WORKING GROUP ON THE CAUSES, EXTENT AND POLICY IMPLICATIONS OF THE CURRENT CRISIS IN INSURANCE AVAILABILITY AND AFFORDABILITY (Feb. 1986) (see especially Chapter 1) [hereinafter DOJ REPORT]. The data reported in this study are updated by the Tort Policy Working Group in a subsequent study, AN UPDATE ON THE LIABILITY CRISIS (Mar. 1987) [hereinafter CRISIS UPDATE].

deductibles. Similar increases have been reported for insurance purchased for public officials. Some cities have decided to "go bare" rather than pay these increases. As a consequence, public services such as playground, swimming, and sporting activities have been substantially curtailed in an effort to minimize risks.⁶ The implications of these increases in the price of coverage and reductions in the availability and scope of coverage have a variety of second-order effects, many seemingly perverse, that extend beyond the class of insureds in question.⁷

Smaller firms, local bodies, and day care centers often are the most severely affected because their other insurance requirements do not provide a sufficiently substantial package to attract coverage for higher risk lines. In this respect, insurance availability and cost may well create a significant barrier to entry for new small firms without established reputations, diversified product lines, and substantial additional insurance requirements (fire, property, auto, group employee policies). In the longer term, this barrier to entry may impair consumer welfare by reducing the range of goods and services available,

6. DOJ REPORT, *supra* note 5, at 9. The Tort Policy Working Group also notes that a recent survey of daycare centers found that 40% of respondents had their insurance canceled, and those with coverage faced premium increases of 200% to 300%. Similar problems have been reported by public transit operators; newspaper and magazine publishers (with respect to libel insurance); nurse-midwives (whose group insurance was canceled and who had severe difficulty in obtaining other coverage); architects and engineers (engineers in toxic substances abatement have faced premium increases of up to 5000% where insurance has been available at all); toy manufacturers; household appliance manufacturers; automobile repair shops and garages; medical equipment manufacturers; biotechnology companies; oil and gas drilling contractors; construction contractors; natural gas transportation companies; general manufacturing; machine tool manufacturing; battery recycling and smelting companies; power equipment manufacturers; general aviation manufacturers (liability insurance has risen from an average of \$211 per plane for business, commuter and private aircraft delivered in 1972, to \$70,000 per plane in 1985); ski field operators; aerospace equipment manufacturers; bus and trucking companies; directors' and officers' liability insurance; bank fidelity bond coverage; liquor retailers; obstetricians/gynecologists, pediatricians and dentists (who have faced sharp increases in premiums and reductions in coverage often by as much as 50%); environmental impairment liability insurance for gradual pollution exposures (47 companies were forced to close hazardous waste management facilities in 1985 for lack of coverage after two major insurers dropped out of the market, leaving only two companies still writing this class of risk); sudden and accidental pollution coverage (now routinely excluded from most general liability insurance policies. *Id.* at 6-13.

7. For example, general medical practitioners commonly refuse to handle pregnancies and deliveries; doctors, general and specialist, insist on all manner of additional tests and opinions ("defensive medicine") in order to forestall liability claims; community service programs have been curtailed; waste disposal sites closed or transferred to small, undercapitalized and perhaps less sophisticated firms which are prepared to run the risk of "going bare" and going bankrupt in the event of claims; small, new, specialized biotechnology firms which cannot obtain coverage are forced to forego promising research. Larger pharmaceutical companies have abandoned research on new vaccines as too risky; individuals are more reluctant to become directors or officers of companies or local bodies when adequate insurance cannot be purchased for them. CRISIS UPDATE, *supra* note 5, at 11-20.

retarding innovation rates, and facilitating supra-competitive pricing by larger firms that remain in these markets.

Canada

Evidence presented to the Ontario Task Force on Insurance (Slater Task Force)⁸ suggests similar patterns of insurance problems in Ontario. A survey of members of the Canadian Manufacturers' Association indicated that nearly half of the respondents experienced a doubling of their liability insurance premiums and reductions in coverage for 1986. Increases of 600% to 800% have not been uncommon. Exporters of products to the U.S. have encountered difficulty in obtaining product liability insurance at any price. Day care centers, truckers, municipalities, school boards, firms in the hospitality and tourism industries, taverns, and directors and officers of corporations all have reported major problems in the pricing and availability of insurance. Bus and transit operators have reported substantial premium increases, in some cases ranging from 1000% to 2000%, often for reduced coverage. Various classes of professionals, for example, architects and engineers, have reported massive premium increases. Volunteer and charitable organizations, sports and recreational groups have reported substantial premium increases; for sports and recreational groups the increases have been between 150% and 900%. Hospitals faced a 362% increase in the basic cost of liability insurance in 1985-86, and only two major insurers remain in this market.⁹

In order to establish more systematically than the above data permit the extent of the similarities and differences between the United States and Canadian insurance crises, it would be important to compare current levels of premiums in both countries for given categories of risk to ascertain (1) whether recent increases in Canada have been as great as those in the United States; and (2) whether the increases, even if similar, have been applied to a lower pre-crisis level of premiums in Canada than in the United States; and thus, whether resulting premiums reflect some significant differential in the assessment of liability exposure in Canada compared to the United States. Simply observing that there have been dramatic increases in liability insurance premiums generally in both countries is insufficient to develop informed insights on the central question of

8. MINISTRY OF FIN. INSTITUTIONS, ONTARIO TASK FORCE ON INSURANCE 31-35 (1986) [hereinafter SLATER TASK FORCE REPORT].

9. *Id.*

whether the insurance and reinsurance markets now treat various insured activities in Canada and the United States as presenting similar liability exposure, despite the formal differences in the two tort systems. Data noted later in this Article suggest that base levels of general liability insurance premiums per capita have been considerably lower in Canada than the United States, and that rates of increase have been much less severe in the former than the latter, but this data is fragmentary and requires detailed corroboration.

ALTERNATIVE EXPLANATIONS OF THE LIABILITY INSURANCE CRISIS

A variety of explanations have been offered from various quarters for the liability insurance crisis. These are reviewed briefly and evaluated as a prelude to developing a sharper focus on the changing complexion of the United States and Canadian tort systems.

Conspiracy

A crude explanation of the current crisis, sometimes offered by the plaintiffs' bar and others, is that insurance companies are conspiring to raise premiums to excessive levels to exploit purchasers of insurance or to panic legislatures or courts into depriving victims of their proper dues.

While property and casualty insurers (like many other industries) are not beyond fixing prices to avoid competition,¹⁰ it seems highly implausible that concerted activity explains the present phenomenon. In the United States, the property and casualty insurance industry apparently comprises over 900 companies and possesses a relatively atomistic market structure, with relative ease of entry. Twenty insurance groups account for fifty-three percent of written premiums, indicating a relatively unconcentrated and workably competitive industry.¹¹ The structure of the Canadian industry is similar.¹² There appears to be no evidence either in the United States or Canada that purchasers of insurance are being confronted by a unified phalanx of insurers all demanding a common price for their insurance. More-

10. See, e.g., *Aetna Insurance Co. v. The Queen*, 1 S.C.R. 731 (Can. 1977) (involving Aetna and 72 other corporations).

11. DOJ REPORT, *supra* note 5, at 28.

12. In 1984, 243 companies offered general liability insurance (compared to 226 in 1978). The four firm concentration ratio was 18.7 in 1984 (compared to 17.3 in 1955). The sixteen firm concentration ratio was 50.7 in 1984 (compared to 42.1 in 1955). F. MATHEWSON & R. WINTER, REPORT TO THE ONTARIO TASK FORCE ON INSURANCE, THE MARKET FOR PROPERTY AND CASUALTY INSURANCE IN ONTARIO Table 4 (1986). Eighty percent of Canadian manufacturing industries are more concentrated than the Canadian general liability industry. In Ontario in 1984, 109 companies wrote general liability insurance. Thirty-two of these reported direct written premiums in excess of \$2.5 million. INS. BUREAU OF CANADA, BRIEF TO THE ONTARIO TASK FORCE ON INSURANCE (1986) [hereinafter INS. BUREAU OF CANADA].

over, proponents of the cartel theory seem unable to point to recent circumstances that have made cartelization of the industry easier now than in the past or to reasons why the tendency apparently has been confined to liability insurance and is not evident in property insurance, which typically is sold by the same insurers. The difficulties of sustaining a cartel over as many firms, as many risk classes, and as large a geographic area as entailed in the present liability insurance crisis seem formidable. In addition, the profit-maximizing strategy for cartel members would require raising prices to monopoly levels, while continuing to provide customers with the service demanded. Monopoly profits cannot be made by withdrawing service. On the contrary, in most market sectors some insurers have refused to renew coverage and have withdrawn from the market. Others have remained and demanded substantial premium increases and/or coverage restrictions. Still others have managed to offer terms which, while less attractive than those previously offered, are superior to those of competitors. This general scenario is not suggestive of tightly concerted action by all former competitors.¹³

This is not to deny that in some sub-segments of the liability insurance market, for example, the hospital or toxic waste markets, the state of competition may be a matter of concern. Economies of scale and specialization seem to imply significant barriers to entry for new insurance providers. In these cases, avoiding regulatory policies that increase entry barriers beyond what they inherently are would seem an important objective. More general proposals by the Slater Task Force for raising initial capitalization requirements for property and casualty insurers and rendering more stringent ongoing liquidity ratios in the interests of "stabilizing" the industry,¹⁴ seem misconceived if sharpening the competitive discipline throughout this industry is considered desirable. Finally, it should be noted that, unlike the United States industry, the insurance industry in Canada is subject to antitrust laws, yet the Canadian enforcement authorities apparently have not seen in the present liability insurance crisis any evidence that would seem to warrant enforcement action.¹⁵

13. See generally Priest, *The Current Insurance Crisis and Modern Tort Law*, 96 YALE L.J. 1521, 1527-29 & nn.39-45 (1987); CRISIS UPDATE, *supra* note 5, appendix at 1-10.

14. See SLATER TASK FORCE REPORT, *supra* note 8, at 107-08, 128-29.

15. For a discussion of the government's role in regulating Canadian issuers, see SLATER TASK FORCE REPORT, *supra* note 8, at 101-34.

The Influence of Foreign-Owned Insurance Companies in the Canadian Market

A related argument is that the presence of foreign-owned (principally United States) companies in the Canadian property and casualty insurance industry suggests that they are acting in concert to recoup large underwriting losses in the United States by forcing Canadian purchasers of insurance to cross-subsidize United States activities.

The Canadian industry, however, is comprised of a significant percentage of non-American owned firms. Nineteen out of the biggest thirty-two general liability insurers in Ontario in 1984 were not American-controlled and seven were Canadian-owned.¹⁶ Entry seems relatively easy, and attempts at supra-competitive pricing by U.S.-owned companies in the Canadian market would be likely to draw a rapid competitive response. Moreover, both this and the previous rationale do not explain why these types of market manipulations have only manifested themselves in the recent past. If these strategies were feasible, why did profit-maximizing firms in the industry fail to exploit Canadian consumers by such means much sooner?

"Imprudent" Prior Premium Pricing

Another explanation of the current crisis is that in the late 1970s and early 1980s insurance companies were attracted by high yields on investments at a time of record-high interest rates, and engaged in excessive competition with each other for the consumer's premium dollar in order to increase cash flow and capitalize on investment opportunities. With falling interest rates in the last several years, premiums have been increased to generate an acceptable overall rate of return.

This explanation presents several odd features. First, in stark contrast to the previous two explanations of the current crisis, it is premised on excessive competition in the industry rather than successful concerted attempts to stifle competition through price fixing or market division. These explanations are difficult to advance simultaneously. Second, while it may be true that premium levels have been increased to reflect reductions in investment income, it is not clear that this implies anything inappropriate about either present or past premium pricing policies. One implication of the argument appears to be that since 1982, instead of falling in real terms, premiums should have been adjusted gradually upwards, rather than adjusted precipitously as has happened in the last year and a half. However, this seems a curious view — insurance companies, at a time of sub-

16. See INS. BUREAU OF CANADA, *supra* note 12.

stantial returns on their investments, also should have been charging substantially higher premiums. But this surely would have led to charges of gouging — that the public was being charged premiums that failed to reflect the substantial increases in insurers' other sources of income. The behavior of insurers both when interest rates were high and, more recently, since they have fallen, seems readily consistent with profit-maximizing, competitive behavior.

Unstable government macroeconomic policies probably should be viewed as the prime culprit for the hardships sustained by insurance buyers as a result of the volatility in premium levels reflecting the more general volatility in interest rates. Moreover, while falling interest rates may have generated rising premium levels in the insurance context, they have generated positive benefits for businesses and consumers in many other contexts. To the extent that the liability insurance crisis is, in part, a product of rapidly changing relationships between premium and investment income (as seems clearly in part the case), it should be viewed in the larger context of the impact of falling interest rates on the economy. Moreover, assuming that present interest rates are expected to remain reasonably stable, the recent adjustments in premium levels would seem to be a short-run transition that does not imply continuing increases in premiums in the future.

However, whether the current liability insurance crisis can be in any way seriously attributed to falling investment income can be doubted on several scores. First, other lines of insurance, such as property and life insurance, for which the relationship between premium and investment income is similarly important, have not exhibited most of the symptoms of the liability insurance crisis, which in turn suggests that the explanation must lie in factors *sui generis* to this sector. Second, a need to raise premium levels to offset reductions in investment income would lead, of course, to premium increases (although not obviously on the scale that have occurred in many cases), but would not lead to insurance coverage being withdrawn or drastically reduced, deductibles being drastically raised, or certain defined classes of risks being excluded from more general policies that previously covered them. Third, it is not entirely clear why higher nominal interest rates, and hence, investment income, should lead to lower premiums if nominal interest rates are accurate forecasts of future inflationary trends, including the various cost components of future insurance claims. Only variations in long-term *real* interest rates (of which some evidence exists) would seem likely,

under competitive conditions, to have any impact on premium levels. This impact is likely to be relatively small, but may be greatest with temporally distant claims (long-tail risks).

Recoupment of Past Underwriting Losses

An extension of the previous argument is that not only have insurance companies sought to rectify past underpricing of premiums but that, in addition, they are attempting to recoup past underwriting losses — losses perhaps exacerbated by a spate of unfortunate tragedies in the recent past, such as several major airline crashes, the Bhopal disaster, the Mexican earthquake, and the asbestos tragedy. This argument is not especially compelling. These losses are sunk costs. Assuming that the industry is reasonably competitive, any attempt by firms which have sustained these past underwriting losses, whether the result of a string of nonrecurring bad luck or not, to recoup them by raising current premiums above levels that current risks would justify would seem likely to induce various competitive responses from insurers which have not sustained these past losses, from new entrants, or from insureds who would find it profitable to form their own risk pools or captive insurance companies or to self-insure.

The Reinsurance Market Cannot Distinguish The Canadian and U.S. Risk Markets

Another frequently made argument is that the reinsurance market confuses the Canadian and American risk markets. This argument also is not plausible. It assumes gross information failures in what has hitherto been regarded as a relatively sophisticated industry. The reinsurance market has, for example, been able to distinguish certain states in the United States, in which courts or legislatures have been disposed to adopt liability regimes that are especially generous to plaintiffs. Reinsurance providers have refused to reinsure risks from these states or have charged differential premia. Moreover, it is not clear why developing an appreciation of the differential exposure entailed for insurers under the Canadian tort system compared to the American system presents substantially more complex informational challenges than developing an appreciation of the higher risks entailed by oil tankers operating in the Persian Gulf compared to, for example, those operating in Alaska. Data noted later in this Article appear to contradict this “confusion” explanation of the Canadian liability insurance crisis.

Unscrupulous/Underemployed Lawyers

While the plaintiffs' bar points to the insurance industry as the villains in the present crisis, some elements in the insurance industry adopt the counter-tactic of alleging that unscrupulous or underemployed lawyers are the major villains, who dredge up highly speculative suits and induce their clients to demand highly inflated awards.

This argument seems as crude and implausible as the counter-vailing conspiracy theory. Above all, it fails to explain the timing of the current crisis. If lawyers are predisposed to act unscrupulously in tort claims, why have they waited until so recently to indulge this apparently highly rewarding penchant? Moreover, why have courts only recently become such easy marks for trumped-up claims and grossly inflated awards?

A partial counter to this response is that lawyers have proliferated greatly in numbers over recent years and are now in gross over-supply. In order to find gainful employment, they are increasingly compelled to seek out new avenues of endeavor and thus turn to fomenting contrived claims.¹⁷

While the number of lawyers has increased more rapidly than the general population in the United States and Canada, the number of lawyers in the United States increased by a factor of 2.9 between 1950 and 1984. This growth factor was less than that of many other occupations, and roughly equivalent to the growth in real Gross National Product (G.N.P.) during this period.¹⁸ While Canada experienced a substantial increase in the number of lawyers in the late 1950s and 1960s, the net increase in practicing lawyers in recent years has been about four percent per year, and is estimated at three percent per year for the foreseeable future, below prevailing increases in real G.N.P. and below the rates of increase of many other occupations.¹⁹ While the recent recession has made it more difficult for young lawyers to establish themselves in the profession, no evidence has been adduced, either in the United States or Canada, which indicates that these new entrants have been responsible for any significant portion of the additional insurance claims.

17. See D. GILL, *LIABILITY INSURANCE: CRISIS IN SUPPLY* 26-29 (1987).

18. Stager, *Are There Too Many Lawyers?*, 9 *CAN. PUB. POL.* 245 (1983); R. Sturgis, *The Cost of the U.S. Tort System: An Address to the American Insurance Association* (Nov. 1985).

19. R. Sturgis, *supra* note 18; see also Pashigian, *The Market For Lawyers: The Determinants of the Demand for and Supply of Lawyers*, 20 *J. L. & ECON.* 53 (1977).

The Changing Contours of the Tort System

A final argument is that the tort system, especially in the United States, has been undergoing a rapid transformation in which the parameters of liability have been extended dramatically and the quantum of awards have been increased equally dramatically. Some observers point to similar, albeit weaker trends in Canada. The next section of this Article attempts to document statistically these trends in both tort systems. To the extent that the trends prove to be more pronounced in the United States than in Canada, we must try to explain why the surface dimensions of the liability insurance crisis seem as severe in Canada.

As the next section shows, the United States tort system indeed has been undergoing a dramatic transformation. This transformation seems to lie at the center of any plausible explanation of the current liability insurance crisis. The only other explanation of any cogency reviewed in this section is the changing relationship between premium and investment income. However, the heart of the explanation seems to lie in the changing contours of tort law, to which we now turn.

STATISTICAL TRENDS IN THE U.S. AND CANADIAN TORT SYSTEMS

The United States

Revenue and Loss Experience

The DOJ Report provides the following data on trends in the United States tort system:

1. *Underwriting losses for 1981-85*: The property and casualty insurance industry reported annual statutory underwriting losses after policyholders dividends of approximately \$6, \$10, \$13, \$21, and \$25 billion.²⁰ For commercial multiple peril policies, annual underwriting losses for this period were \$0.5, \$1.2, \$1.7, \$2.9, \$3.0 billion.²¹ For commercial general liability insurance, annual underwriting losses for the period were \$1, \$1.7, \$2.1, \$3.2, and \$4.6 billion.²² For medical malpractice liability insurance, annual underwriting losses for the period were \$0.5, \$0.7, \$0.8, \$1, and \$1.4 billion.²³

2. *Profit and return*: General commercial liability and medical malpractice insurance accounted for only seven percent of written premiums of all property and casualty lines in 1984. Taking account of investment income, the property and casualty insurance industry recorded a net profit of \$7.6 billion in 1985 (the \$25.2 billion under-

20. DOJ REPORT, *supra* note 5, at 17.

21. *Id.* at 19-20.

22. *Id.* at 20-21.

23. *Id.* at 21.

writing loss was offset by \$32.8 billion in investment and other income).²⁴ From 1975-1984, the property-casualty insurance industry produced an annual rate of return on net income of 10.9%.²⁵ In 1984 the property-casualty insurance industry produced an annual rate of return of 1.8%, compared to the median return rate for Fortune 500 companies of 13.6%.²⁶ In 1986, the property-casualty insurance industry's profitability substantially improved — the 1986 rate of return was roughly equivalent to its ten year average and was slightly less than the ten year rate of return for Fortune 500 industrial corporations. Property/casualty stocks generally outperformed the stock market from January 1984 to January 1986, but trailed the market's performance during 1986.²⁷

Again, it bears noting that liability insurance constitutes a very small part of the book of business written by the industry. With respect to so-called crisis lines, a recent study by the United States Antitrust Division of the Department of Justice reports sharp recent increases in the variability of loss incurred and loss adjustment ratios for insurers, and thus concomitant increases in uncertainty of exposure in these lines.²⁸ Prior to 1984, commercial line premiums had declined in constant dollar terms for five consecutive years. Premiums in 1984, while higher, were still twenty percent less than premiums collected in 1978, despite record-high pay-outs.²⁹

The data noted above describe broad relationships between revenue and loss experience. Breaking down loss experience to pinpoint sources of increased loss experience, statistics indicate both a dramatic increase in the size of awards and an equally dramatic increase in the incidence of certain classes of tort suits.

3. *Size of awards*: The average medical malpractice jury verdict increased 363%, from \$220,018 in 1975 to \$1,017,716 in 1985. Malpractice claim severity over the decade 1975-84 has risen twice as fast as the Consumer Price Index.³⁰ Average product liability jury verdicts increased during the same period 370%, from \$393,580 to \$1,850,452. These increases greatly outpaced the rate of inflation — one dollar in 1985 had approximately half the buying power of one

24. *Id.* at 19.

25. *Id.*

26. *Id.* at 18-19.

27. CRISIS UPDATE, *supra* note 5, at 23-24.

28. *Id.*, appendix at 19-22.

29. DOJ REPORT, *supra* note 5, at 22.

30. Danzon, *The Frequency and Severity of Medical Malpractice Claims: New Evidence*, 49 LAW & CONTEMP. PROBS. 57 (1986) [hereinafter Danzon, *New Evidence*].

dollar in 1975. There has been a marked increase in very large awards: in 1975 there were three million-dollar or greater medical malpractice verdicts and nine million-dollar product liability verdicts. In 1984, there were seventy-one and eighty-six such awards respectively.³¹ Pain and suffering damages seem to comprise a high portion of these large awards. For example, non-economic damages account for approximately twenty-seven percent of the total amount of medical malpractice awards of between \$100,000 and \$200,000. Noneconomic damages account for fifty-four percent of the total amount of awards over \$600,000.³² The average Cook County, Illinois, punitive damage award in personal injury cases increased from \$40,000 in 1970-74 to \$1,152,174 in 1980-84 (1984 dollars).³³ Average jury verdicts in wrongful death cases involving adult males increased from \$223,259 in 1975 to \$946,140 in 1985, a 324% increase.³⁴ Danzon reports estimated annual growth rates in average incurred cost per claim for the period 1971-78 as follows: physicians and surgeons 12.1%; hospitals 18.9%; product liability bodily injury 19.4%; automobile bodily injury 14.1%.³⁵ The DOJ Report notes that one jury verdict reporting service found that the average jury verdict in personal injury lawsuits had increased by approximately twenty-five percent or more in three separate years; 24.5% in 1980, 30.49% in 1981, and 27.54% in 1983.³⁶

The Rand Corporation's Institute for Civil Justice recently conducted a study of trends in jury awards in Cook County, Illinois and San Francisco, California from 1960 to 1984.³⁷ The study showed that during this period, using inflation-adjusted dollars, the average jury malpractice award increased 2,167%, from \$52,000 to \$1,179,000, in Cook County and 830%, from \$125,000 to \$1,162,000, in San Francisco. The comparable increase in average jury product liability awards was 212%, from \$265,000 to \$828,000, in Cook County and 1,016%, from \$99,000 to \$1,105,000, in San Francisco. The increase in "expected jury awards" — the average jury award multiplied by the plaintiff's likelihood of success — has been even more dramatic. From 1960 to 1984, the expected jury malpractice award increased by 4,254%, from \$13,000 to \$566,000, in Cook County and 1,172%, from \$34,000 to \$616,000, in San

31. DOJ REPORT, *supra* note 5, at 40.

32. *Id.* at 47-49.

33. CRISIS UPDATE, *supra* note 5, at 47.

34. DOJ REPORT, *supra* note 5, at 47-49.

35. Danzon, *Tort Reform and The Role of Government in Private Insurance Markets*, 13 J. LEGAL STUD. 517, 519 n.6 (1984).

36. DOJ REPORT, *supra* note 5, at 47-49.

37. M. PETERSON, CIVIL JURIES IN THE 1980S: TRENDS IN JURY TRIALS AND VERDICTS IN CALIFORNIA AND COOK COUNTY, ILLINOIS (Rand Corp. Inst. for Civ. Just. 1987).

Francisco. The comparable increase in expected jury product liability awards was 445%, from \$76,000 to \$414,000, in Cook County and 927%, from \$56,000 to \$575,000, in San Francisco. Average jury award data and expected jury award data both show that most of the increase in jury verdicts from 1960 to 1984 occurred during the period 1980-84. In many categories, the increase in awards from 1980-84 was double or triple the entire increase in awards from 1960 to 1980. Substantial increases in inflation-adjusted million-dollar jury awards are also reported. Million-dollar awards accounted for 85% of the total damages awarded by Cook County juries in 1980 to 1984, compared to 4% in 1960-64, and 58% of the total damages awarded by San Francisco juries during the same period, compared to 14% in 1960-64. As the data on increases in expected awards imply, plaintiffs have steadily increased the percentage of cases in which they prevail before juries. In product liability cases in Cook County and in malpractice cases in both Cook County and San Francisco, plaintiffs have roughly doubled the percentage of tried cases in which they prevail before juries, from approximately one quarter of such cases in 1960-64 to one half in 1980-84.³⁸ Another study has found that in cases involving severely injured plaintiffs, corporate defendants were required to pay over four times the amount paid by individual defendants in similar cases and that corporate defendants were more likely to be found liable than individual defendants.³⁹

Incidence of Tort Lawsuits

With respect to the incidence of lawsuits, the number of product liability cases filed in federal district courts has increased from 1,579 in 1974 to 13,554 in 1985, a 758% increase. Cases filed against physician-owned companies have increased from 10,568 in 1979 to 23,545 in 1983, a 123% increase in four years.⁴⁰ The number of medical malpractice suits per 100 physicians doubled between 1979 and 1983 and tripled during this period for obstetricians/gynecologists.⁴¹ A recently published American Medical Association study reports that, on average, claims per 100 physicians increased from

38. *Id.* at 17, 22, 26, 33.

39. A. CHIN & M. PETERSON, DEEP POCKETS, EMPTY POCKETS: WHO WINS IN COOK COUNTY JURY TRIALS 42-43 (Rand Corp. Inst. for Civ. Just. 1985).

40. DOJ REPORT, *supra* note 5, at 45.

41. *Id.* at 47.

3.2 in 1980 to 10.1 in 1985.⁴² Over the decade 1975-84, a major U.S. medical insurer reports an average annual growth rate of claim frequency per physician of ten percent.⁴³ Claims against municipal and county officials increased 141% between 1979 and 1983. Tort claims against municipalities also have increased dramatically; for example, New York City experienced a 375% increase from 1979 to 1983 in the number of personal injury claims brought against it.⁴⁴

The transaction costs associated with this proliferation in tort litigation are extremely high. A recent study by the Institute of Civil Justice estimated that for all tort cases, the net compensation paid to plaintiffs amounted to only forty-six percent of the total 1985 expenditures for tort litigation.⁴⁵

These assorted data on the dramatic escalation in the size and incidence of claims should make it clear beyond doubt that the liability insurance crisis is not a contrivance of the insurance industry but, in large part, is a result of an explosion both in the parameters and quantum of liability in the United States tort system. The size of the transaction costs incurred in dispensing compensation under the system raises further questions as to whether victims, despite expansions of liability and increases in awards, are really as much beneficiaries of the system as their agents — the lawyers.

Canada

Canada has experienced somewhat similar trends in the frequency and severity of claims met out of various forms of liability insurance. Industry figures indicate that the loss ratio for liability insurance was 78.2% in 1978, 68.9% in 1979, 58.1% in 1980, 71.7% in 1981, 86.5% in 1982, 100.4% in 1983, and 108% in 1984. For the period 1979 to September 1985, underwriting losses for the property-casualty business as a whole totalled \$4.25 billion, and investment income totalled almost \$4 billion, leaving losses on insurance operations of about \$275 million. Nominal return on equity was 6.99% in 1984 and real return on equity was 2.64% for the year.⁴⁶

Data made available to the author by one of Canada's major general liability insurers and displayed in Appendices A and B trace

42. AMERICAN MEDICAL ASS'N, *THE CONTINUING NEED FOR LEGISLATIVE REFORM OF THE MEDICAL LIABILITY SYSTEM* 7 (1987).

43. Danzon, *New Evidence*, *supra* note 30, at 63.

44. DOJ REPORT, *supra* note 5, at 42. That there has been a general explosion in tort suits in state courts is challenged by the NATIONAL CENTER FOR STATE COURTS, *STATE COURT CASELOAD STATISTICS: ANNUAL REPORT, 1984* (1986). The National Center's findings are strongly criticized by the Tort Policy Working Group in *CRISIS UPDATE*, *supra* note 5, at 42-44.

45. J. KAKOL & N. PACE, *COSTS AND COMPENSATION PAID IN TORT LITIGATION* 70 (Rand Corp. Inst. for Civ. Just. 1986).

46. See INS. BUREAU OF CANADA, *supra* note 12.

trends over the last decade in numbers of large loss settlements for general liability bodily injury, and gross loss payments by age of closing, indicating in the first case a rapid increase in the number of large claims and in the second high average annual increases in size of settlements.

Professor Samuel Rea recently has calculated⁴⁷ the damages in a well-known decision of the Supreme Court of Canada in 1978, *Andrews v. Grand and Toy Alberta Limited*.⁴⁸ Professor Rea estimates, in the light of subsequent legislative and judicial modifications in the method of calculating damages in personal injury cases, that the 1978 award of \$896,147 would be equivalent to \$3,731,871 in 1986 — an increase of 316% during a period when prices increased 84%.⁴⁹ The increase can be explained largely by changes in judicial methods of calculating costs of future care in permanent disability cases.

While this study's primary focus is third party liability insurance rather than auto insurance, trends in the auto insurance context are of some interest. In a recent paper, Harry J. Saunders, Chairman of the Insurance Bureau of Canada, notes:

The automobile accident rate in this province [Ontario] has declined by 13.5% since 1981, but the frequency of bodily injury claims has increased by 21.3%. That's a 40% swing in the space of four years - and the average cost per claim has risen by 54% in that period. That's a devastating combination which translates into an increase of bodily injury costs per insured car of 87% in four years.⁵⁰

Appendices C - G display data from the Canadian Medical Protective Association, a professional liability insurance association to which over eighty-five percent of all doctors in Canada belong. The data show dramatically rising trends in premiums, average awards and settlements, total damages awarded against physicians, defense costs, and writs served against doctors.⁵¹ Another recent analysis shows that since 1977, there has been an average annual increase in writs served per doctor of 10.2% and average annual increases in claim severity of 12.8%.⁵²

47. S. Rea, *Economic Perspectives on the Liability Insurance Crisis*, Special Lecture for the Law Society of Upper Canada (Mar. 6, 1987) (text on file with the author).

48. 2 S.C.R. 229 (Can. 1978).

49. See S. Rea, *supra* note 47.

50. H. Saunders, *Back to Basics: The Search for Restraint in Tort* (paper presented to the Conference on Law and Contemporary Affairs, Univ. of Toronto Law School, Jan. 16, 1987).

51. Sellers, *The Potential Effect of Liability Claims on the Canadian Public Health System*, in SLATER TASK FORCE REPORT, *supra* note 8, at 355-63h.

52. Stergiou, *Medical Malpractice Coverage: A Growing Crisis in Canada*, CANADIAN INS. AGENT & BROKER (June 1984).

THE CHANGING FACE OF AMERICAN TORT LAW

Within the constraints of a single article, only a superficial survey of major currents in American tort law that appear to be contributing factors to present problems affecting the availability, affordability, and adequacy of liability insurance is possible. United States tort law falls primarily within the individual jurisdictional domains of each of the fifty states, with limited appellate jurisdiction exercised by the United States Supreme Court. As a result, a survey of American tort law must grapple with often highly fluid doctrine within a given jurisdiction as well as substantial variations across jurisdictions. The account that follows necessarily involves high levels of generalization intended to do no more than identify the most problematic features of recent legal developments. These developments might be conceived of as bearing either on determinations of liability or on quantifications of liability. Importantly, what unifies these developments, in the present context, is the increase in uncertainty each generates for insurers attempting to price risks.

Determinations of Tort Liability

The Expanding Reach of Negligence Principles

A major misconception of non-United States legal scholars (and perhaps also some United States legal scholars) is that the increase in tort litigation is primarily attributable to the movement from negligence to strict liability in recent years, especially in the products liability context. But as a prominent United States torts scholar, Professor Gary Schwartz, has persuasively argued, the so-called "explosion" of tort liability in the United States in the past quarter-century has been quite explicitly an explosion of negligence liability, rather than a substantial extension of the spheres of application of strict liability.⁵³ Many of the sectors in the United States in which problems of insurability recently have emerged as most acute ostensibly are governed by negligence principles.⁵⁴ However, in a broad range of settings, the distinction between negligence-based liability

53. Schwartz, *The Vitality of Negligence and The Ethics of Strict Liability*, 15 GA. L. REV. 963 (1981).

54. These sectors comprise all suppliers of services, including, for example, physicians and other professionals, day care centers, municipalities, ski-field operators, and bus and truck operators. The extension of liability to psychiatrists who fail to warn third parties of patients' dangerous propensities; to tavern or restaurant proprietors or social hosts who fail to prevent patrons or guests leaving their premises too intoxicated to drive safely; to proprietors of nursing homes or day care centers for abuse of patients or children by staff members; to municipalities for abuse of authority, excessive force or failure to act by police officers or for recreational accidents occurring in the course of activities organized under their aegis; to physicians for "bad babies"; and to accountants for improperly executed audits, all represent extensions of liability to particular acts or omissions through the application of negligence principles.

and strict liability is more formal than functional. "Fault" is not a self-defining term. Under strict (as opposed to absolute) liability, at least in a products context, plaintiffs still are required to prove a "defect," again not a self-defining term. A number of the United States products liability cases first recognizing liability for failing to design a crashworthy car or liability for other design defects, liability for foreseeable consumer misuse, or liability for failure to provide an adequate warning of safety hazards associated with an otherwise sound product, were explicitly decided on negligence principles.⁵⁵ It may well be, as Priest has eloquently argued,⁵⁶ that many of the same intellectual presuppositions that have driven the movement to strict liability also have motivated the expansion of the realm of negligence. Such presuppositions include assumptions of manufacturers' market power; assumptions of consumer ignorance or powerlessness; assumptions about the virtues of internalizing to suppliers of goods or services the social costs attendant on their use; and assumptions about the superior risk bearing or risk spreading capabilities of suppliers relative to consumers.

Danzon has found that in the case of medical malpractice, abolition of the locality rule, which provides that local standards of practice determine negligence, abolition of charitable immunity, restrictions on the scope of the informed consent defense, and expansion of the scope of *respondeat superior* by various states prior to 1970 accounted for a high percentage of increased claim frequency, increased severity of claims and higher total claims costs over the period 1975-1978.⁵⁷ In other words, shifts in doctrine *within* the negligence regime, perhaps in response to similar forces driving the movement to strict products liability, yielded similar impacts. Without seeking to sustain the extreme claim that formal adoption of strict liability over negligence makes no significant difference to liability determinations in any context (indeed the opposite is argued below), proposals to reform United States tort law by reinstating negligence regimes where they have been formally displaced by strict liability are unlikely to eliminate substantial uncertainty regarding assignment of liability, without further efforts to define with some precision the determinants of standards of care and remoteness that

55. See, e.g., Noel, *Manufacturers' Negligence of Design or Direction for Use of a Product*, 71 *YALE L.J.* 816 (1962).

56. Priest, *The Invention of Enterprise Liability: A Critical History of the Intellectual Foundations of Modern Tort Law*, 14 *J. LEGAL STUD.* 461 (1985).

57. P. DANZON, *MEDICAL MALPRACTICE: THEORY, EVIDENCE AND PUBLIC POLICY* 76-77 (1985) [hereinafter P. DANZON, *MEDICAL MALPRACTICE*].

set the bounds of a negligence regime.

Strict Liability

In the early 1960s, courts expanded manufacturers' strict liability from such areas as food and drugs to all products. Priest argues that this expansion was driven by the presuppositions noted above and has posed major conceptual problems of locating strict liability on the continuum between negligence and absolute liability.⁵⁸ While fault need not be proved, courts have refused to accept that every negative interaction with a product (for example, tripping over a chair or cutting oneself with a kitchen knife) creates liability, which would, in that event, be absolute. Attempts to maintain an uneasy equilibrium between fault-based liability and absolute liability have revolved around the concept of "defect." Defects have been categorized in three ways: construction defects, design defects, and warning defects.⁵⁹ The first category — construction defects — in most contexts poses few difficulties: a particular product is defective if, relative to other units of the same product, it has been made in such a way that the divergence occasions injury to a user.⁶⁰ The early 1960s' landmark strict liability cases typically involved this scenario (for example, exploding soda bottles) and represented relatively modest extensions of negligence principles in contexts where *res ipsa loquitur* and concepts of merchantability and fitness had often produced the same results.⁶¹

The second category — design defects — has proved much more problematic. Here the victim argues that all units of a particular type of product possess dangerous features.⁶² Such issues could be, and indeed were, litigated under negligence principles. Victims sometimes succeeded when they could show, for example, that the

58. Priest, *supra* note 56, at 505-33. For a review of many of these problems, see A. Schwartz, *Products Liability Law* (Law and Economics Workshop, University of Toronto, Dec. 10, 1986) (copy on file with the author).

59. W. KEETON, D. DOBBS, R. KEETON & D. OWEN, *PROSSER AND KEETON ON THE LAW OF TORTS* 695-99 (5th ed. 1984) [hereinafter *PROSSER & KEETON*].

60. *Id.* at 695; *see also* *Ford Motor Co. v. Zahn*, 265 F.2d 729 (8th Cir. 1959); *MacPherson v. Buick Motor Co.*, 217 N.Y. 382, 111 N.E. 1050 (1916); *RESTATEMENT (SECOND) OF TORTS* § 395 (1965).

61. *See, e.g.*, *Escola v. Coca Cola Bottling Co.*, 24 Cal. 2d 453, 150 P.2d 436 (1944); *Greenman v. Yuba Power Prod., Inc.*, 59 Cal. 2d 57, 377 P.2d 897, 27 Cal. Rptr. 697 (1962); *Henningsen v. Bloomfield Motors, Inc.*, 32 N.J. 358, 161 A.2d 69 (1960); *Kassab v. Central Soya*, 432 Pa. 217, 246 A.2d 848 (1968); *Franklin Serum Co. v. Hoover & Son*, 418 S.W.2d 482 (Tex. 1967); *Kroger Co. v. Bowman*, 411 S.W.2d 339 (Ky. 1967); *Vallis v. Canada Dry Ginger Ale, Inc.*, 190 Cal. App. 2d 35, 11 Cal. Rptr. 823 (1961).

62. *See* *PROSSER & KEETON, supra* note 59, at 688-89, 698; *see also* *Barker v. Lull Eng'g Co.*, 20 Cal. 3d 413, 573 P.2d 443, 143 Cal. Rptr. 225 (1978); *Greenman v. Yuba Power Prod., Inc.*, 59 Cal. 2d 57, 377 P.2d 897, 27 Cal. Rptr. 697 (1962); *RESTATEMENT (SECOND) OF TORTS* § 398 (1965).

installation of a guard on a power lawnmower at small cost would reduce foreseeable accidents, or when automobiles, which were perfectly sound in moving from A to B, were found uncrashworthy. In such cases, however, the perspective of the adjudicator under negligence principles was essentially an *ex ante* perspective. The question was: what should a defendant reasonably have done by way of product modification, given the risks associated with a product's use that were known or reasonably discoverable by defendant at the time of the product's sale, and given the costs of product modifications? While neither regulatory nor industry standards were conclusive on this question,⁶³ proof that a given design followed widely practiced norms is some indication that defendant was not at fault.⁶⁴ Moreover, there was little room for debate that the usual defenses to a negligence action, such as voluntary assumption of risk or contributory or comparative negligence, applied to the design defect context if the victim's own actions significantly contributed to the occurrence of the accident.

The advent of strict liability altered the definition of "design defect" in significant ways. A widely employed judicial definition requires plaintiff to prove either (a) that the product failed to perform as safely as an ordinary consumer would expect when used in an intended or reasonably foreseeable manner; or (b) that the product's design proximately caused plaintiff's injury and defendant fails to prove, in the light of the relevant factors, that the benefits of the challenged design outweigh the risks of danger inherent in such design.⁶⁵ In the latter situation, relevant factors include the gravity of the danger posed by the challenged design, the likelihood that such danger would occur, the mechanical feasibility of a safer alternative design, the financial cost of an improved design, and the adverse consequence to the product and the consumer that would result from an alternative design. The first test is sometimes referred to as the "rea-

63. See, e.g., *Fabian v. E.W. Bliss Co.*, 582 F.2d 1257 (10th Cir. 1978); *Johnson v. Husky Ind., Inc.*, 536 F.2d 645 (6th Cir. 1976); *Elsasser v. American Motors Corp.*, 81 Mich. App. 379, 265 N.W.2d 339 (1978); *Forrest City Mach. Works, Inc. v. Aderhold*, 273 Ark. 33, 616 S.W.2d 720 (1981); *Lenhardt v. Ford Motor Co.*, 102 Wash. 2d 208, 683 P.2d 1097 (1984); *Owens v. Allis-Chalmers Corp.*, 414 Mich. 413, 326 N.W.2d 372 (1982); *Blueflame Gas, Inc. v. Van Hoose*, 679 P.2d 579 (Colo. 1984).

64. See, e.g., *Rucker v. Norfolk & Western Ry. Co.*, 77 Ill. 2d 434, 396 N.E.2d 534 (1979); *Moehle v. Chrysler Motors Corp.*, 93 Ill. 2d 299, 443 N.E.2d 575 (1982); *Berkebile v. Brantley Helicopter Corp.*, 225 Pa. Super. 349, 311 A.2d 140 (1973); *McDaniel v. McNeil Laboratories, Inc.*, 196 Neb. 190, 241 N.W.2d 822 (1976).

65. See PROSSER & KEETON, *supra* note 59, at 698-700; see also *Barker*, 20 Cal. 3d at 432, 573 P.2d at 455-56.

sonable expectations” test, the second an *ex post* “risk-utility” test.⁶⁶

Serious uncertainties surround both tests. The reasonable expectations test is, to some extent, a tautology. What consumers will expect of a product will, in part, be a function of the qualities a court determines it should have exhibited.⁶⁷ Moreover, by imposing liability for hazards that arise not only in intended uses but in other reasonably foreseeable uses, liability for foreseeable misuse (already recognized in some negligence-based cases) seemed to be confirmed while leaving highly uncertain the scope of defences such as *volenti* and contributory or comparative negligence.

Switching from an *ex ante* to an *ex post* perspective has raised a number of difficulties. Is only after-the-fact knowledge of safety hazards to be imported into the decision, or are after-the-fact developments in product design also to be considered? If the latter, will this create perverse incentives for manufacturers to suppress safety innovations for fear of incurring retrospective liability for previously sold products?⁶⁸ More generally, by imposing *ex post* liability for what may have been *ex ante* unknowable risks in the interest of requiring improved product design *in the future*, now that the full costs and benefits of the challenged design and alternatives to it can be assessed, the courts simultaneously have imposed *retrospective* liability for risks⁶⁹ that neither manufacturers nor insurers were likely to have been able to predict or price accurately at the time the product was produced. The judicial justification for this approach is that this relieves the courts of the task of determining what was previously feasible or not feasible and casts this burden on the party with the superior ability to make this judgment.⁷⁰ This justification in no way mitigates the pricing and insurability problems associated with what often may be unknowable risks. The problem is particularly acute with long-tail risks such as those associated with vaccines or drugs such as DES, where serious health hazards may only materialize after a substantial time lapse, and where safer medical substitutes may have emerged in the interim. Insurers who may have covered this class of risk at the time of the product’s sale may face uncertain exposure almost indefinitely.

Moreover, it is far from clear whether the courts have any special competence to discharge the implicit prospective public standard-set-

66. See *Barker v. Lull Eng'g Co.*, 20 Cal. 3d 413, 573 P.2d 443, 143 Cal. Rptr. 225 (1978), and comments thereon in Schwartz, *Foreword: Understanding Products Liability*, 67 CALIF. L. REV. 435 (1979).

67. See Calabresi & Klevorick, *Four Tests for Liability in Torts*, 14 J. LEGAL STUD. 585, 585-86 (1985).

68. *Id.* at 624.

69. *Id.* at 613.

70. See *id.*; see also *Barker*, 20 Cal. 3d at 432, 573 P.2d at 456.

ting role which they have assumed.⁷¹ For example, the Maryland Court of Appeals recently held that handguns are defective, not because they do not achieve their intended purpose, but because they do so too well, generating substantial costs for victims of crime for which manufacturers and retailers should be strictly liable.⁷² It must be acknowledged that even under negligence principles, the Learned Hand test of negligence, which requires that possible precaution costs be weighed against expected accident costs, requires the courts to adopt a cost-benefit mode of analysis to define appropriate standards of performance.⁷³ In the design defect context and perhaps others, such as medical malpractice, courts may not be especially well-equipped to perform this function.

The third category of product defect is warning defects. Issues regarding warning defects typically have arisen in cases in which a product may present special risks to certain sub-groups of users with unusual characteristics,⁷⁴ for example, consumers with toxic or allergic reactions,⁷⁵ or to users of a product in especially risky settings, for example, using highly flammable substances near a flame.⁷⁶ In these contexts, the question of the adequacy of a warning presents issues similar to those that have arisen under negligence regimes, at least in cases where the manufacturer knew or reasonably should have known of the special hazards involved. Under both regimes, court decisions have been extraordinarily divergent in the standards that they have applied to warnings.⁷⁷ This uncertainty is readily ex-

71. See Brown, *Comment on Calabresi and Klevorick's "Four Tests for Liability in Torts,"* 14 J. LEGAL STUD. 629 (1985).

72. *Kelley v. R.G. Industries Inc.*, 304 Md. 124, 497 A.2d 1143 (1985) (commented on in Note, *Kelley v. R.G. Industries: Gun Control Fires Back*, 21 TORT & INS. L.J. 493 (1986)); see generally Note, *Handguns and Products Liability*, 97 HARV. L. REV. 1912 (1984).

73. See *United States v. Carroll Towing Co.*, 159 F.2d 169 (2d Cir. 1947).

74. See, e.g., *Tomer v. American Home Prod. Corp.*, 368 A.2d 35 (Conn. 1976); *Basko v. Sterling Drug, Inc.*, 416 F.2d 417 (2d Cir. 1969); *Robbins v. Alberto-Culver Co.*, 499 P.2d 1080, 1086 (Kan. 1972); *Erny v. Revlon, Inc.*, 459 S.W.2d 261 (Mo. 1970); *Crocker v. Winthrop Laboratories, Inc.*, 514 S.W.2d 429 (Tex. 1974); see also RESTATEMENT (SECOND) OF TORTS § 402A comment j (1965); PROSSER & KEETON, *supra* note 59, at 685-89, 697-98.

75. See Panel Discussion, *Medico-Legal Aspects of Allergies*, 24 TENN. L. REV. 840-42 (1957); *Whitemore, Allergies and Other Reactions Due to Drugs and Cosmetics*, 19 SW. L.J. 76 (1965); see also *Ryes v. Wyeth Laboratories, Inc.*, 498 F.2d 1264 (5th Cir. 1974); *Seley v. G.D. Searle & Co.*, 67 Ohio St. 2d 192, 423 N.E.2d 831 (1981).

76. See, e.g., *Jones v. Hittle Serv., Inc.*, 219 Kan. 627, 459 P.2d 1383 (1976); *Shell Oil Co. v. Gutierrez*, 119 Ariz. 426, 581 P.2d 271 (1978); *Ruggeri v. Minnesota Min. & Mfg. Co.*, 63 Ill. App. 3d 525, 380 N.E.2d 445 (1978).

77. See PROSSER & KEETON, *supra* note 59, at 697-98, 685-89.

plained. Given that *ex post* a serious injury has been caused to the plaintiff by a product, any warning attached to the product by definition was inadequate to avert the injury, and by a relatively easy slide of logic, simply inadequate.⁷⁸ If the plaintiff had been more fully, explicitly, or emphatically appraised of the product hazards, his or her sense of self-preservation would have led to appropriate precautions. As to when a warning should trigger the defense of voluntary assumption of risk, must the warning lay out a probability distribution of mishaps and a correlated severity of consequence schedule associated with this probability distribution? Detailed information of this kind, of course, entails such complexity that many warnings are unlikely to be read or fully comprehended. Conversely, more elliptical warnings risk being viewed by courts as insufficiently precise. Moreover, because warnings are typically the cheapest precaution open to a product manufacturer, a further slide of logic will readily induce courts to hold that, given the seriousness of the safety consequences *ex post*, either attaching a warning where none existed or attaching a more extensive warning where a less extensive one existed is the least that might be expected of a manufacturer and is clearly cost-justified.⁷⁹

The general adoption of strict products liability in the United States has added a further dimension of complexity to the issue of warning defects. In *Beshada v. Johns-Manville Products Corporation*,⁸⁰ the New Jersey Supreme Court held manufacturers of asbestos liable to asbestos workers, even on the factual assumption that the health hazards associated with asbestos in low exposure settings were neither known nor knowable at the time exposure occurred. The court rejected a "state of the art" defense and held that a product is defective (1) if with the benefit of hindsight, the risks it presents exceeds its utility, or (2) when the health risks are less than the product's social utility, if the risks, with the benefit of hindsight, could have been reduced still further by appropriate warnings.⁸¹ In *Beshada*, the court held that the product was defective, at least in this second sense, in part justifying its decision on the risk spreading properties of strict liability.⁸² Characterized by critical commentators as requiring warnings of the unknowable in order for manufacturers to avoid liability, and thus as teetering on the brink of abso-

78. Calabresi & Klevorick, *supra* note 67, at 605.

79. See Twerski, Weinstein, Donaher & Piehler, *The Use and Abuse of Warnings in Products Liability — Design Defect Litigation Comes of Age*, 61 CORNELL L. REV. 495 (1976); Sales, *Duty to Warn and Instruct for Safe Use in Strict Tort Liability*, 13 ST. MARY'S L.J. 521 (1982).

80. 90 N.J. 191, 447 A.2d 539 (1982).

81. *Beshada*, 90 N.J. at 202, 447 A.2d at 545.

82. See *id.* at 202, 205, 447 A.2d at 545, 547.

lute liability, the decision has proven highly controversial.⁸³ The same court recently has refused to extend its holding to a drug that subsequently exhibited a side effect that was previously unknown and unknowable, suggesting that special features distinguished the asbestos case.⁸⁴ Thus, considerable legal uncertainty now exists about when product liability for health hazards will be imposed because of failure to warn.

Apart from strict products liability, the United States "Superfund" legislation passed by Congress in 1980⁸⁵ now also imposes strict liability on generators of toxic wastes which are contributed to waste storage sites, and on operators of the sites for site cleanup costs if dangers of discharge exist. As a matter of common law doctrine, there may well be strict liability on the part of these parties to injured third parties in the event discharge occurs, under the law of nuisance or the doctrine in *Rylands v. Fletcher*⁸⁶ (or modern variations thereof). For the most part, however, the events that trigger liability, either under Superfund or at common law, are reasonably well defined, although the consequences may not be. Uncertainties tend to relate to other issues, particularly that of joint and several liability (discussed below).

More generally, the major conceptual difficulty with strict liability, justified in social insurance terms, is that superior risk-spreading ability is what triggers liability. However, the internal structure of the superior risk spreader rationale for liability makes it unclear whether either the presence of fault *or a defect* is logically required to ground liability. On risk-spreading rationales, why shouldn't a person who trips over a kitchen chair or cuts himself on a carving knife be able to sue the manufacturer? At this point, strict liability collapses into absolute liability, with an arbitrary designation of an insurer as the liable party. Indeed, why not allow the victim to sue *anyone* who ostensibly is a superior risk bearer to him or to the chairmaker, for example, the latter's banker, law firm, accounting

83. See, e.g., Note, *Products Liability — Strict Liability in Tort — State of the Art Defense Inapplicable in Design Defect Cases*, 13 SETON HALL L. REV. 625 (1983); Comment, *Beshada v. Johns-Manville Products Corp.: Adding Uncertainty to Injury*, 35 RUTGERS L. REV. 982, 1008-15 (1983); see also *Feldman v. Lederle Laboratories*, 97 N.J. 429, 479 A.2d 374 (1984).

84. *Feldman v. Lederle Laboratories*, 97 N.J. 429, 468 A.2d 374 (1983); see Rabin, *Indeterminate Risk and Tort Reform: Comment on Calabresi and Klevorick*, 14 J. LEGAL STUD. 633, 635 (1985).

85. Comprehensive Environmental Response, Compensation and Liability Act, 42 U.S.C. § 9601 (1986).

86. L.R. 3 H.L. 330 (1868).

firm, securities underwriter, timber supplier, trucking operator, or indeed a large, well-endowed, well-insured, or well-diversified enterprise totally unconnected to either party?

At the limit, it is not clear why, if the courts are committed to spreading accident costs as thinly as possible, there is any logical stopping point short of rendering the state liable for all accident costs (whether or not this is an efficient form of insurance in other respects). Even short of this stopping point, the courts in pursuing a superior risk bearer inquiry would seem required to give primacy to whether one party is insured or not; or, if neither party is insured, whether one is better diversified than the other; or, if neither is well-diversified, but the adjudicator believes in the declining marginal utility of money and that interpersonal utility comparisons are possible (that is, that a given loss reduces the utility of a rich person less than a poor person),⁸⁷ the relative wealth of the parties. By long historical tradition in common law civil disputes, the courts are supposed to sedulously eschew these considerations. To now make these considerations determinative of liability would cast them in a radically new role.

This is not, of course, to suggest that the courts are pushing relentlessly toward state liability for all accident costs or that the above considerations that may bear on relative private risk bearing capacity systematically are pursued by the courts. In the products liability context, the net of liability typically has not been cast more widely than the product manufacturer. In addition, social insurance considerations bearing on liability have been tempered by some concern with deterrence or corrective justice rationales for liability by insisting on at least the semblance of a "defect." However, this still leaves a substantial domain of uncertainty — it may be difficult for courts to convince insurers that the liability net will not be extended in the future. Even within the present liability net, it is not clear that there is any principled basis for reconciling social insurance and deterrence rationales for liability and therefore what weight courts will attach to each rationale in case-by-case adjudications.

Defenses

With the generalized adoption of strict liability in the products context, United States courts have had not only to wrestle with the meaning of product "defect", but also have been mired in considerable confusion about the scope of manufacturer defenses to strict lia-

87. See G. Calabresi, *The New Economic Analysis of Law: Scholarship, Sophistry, or Self-Indulgence?* (Proceedings of the British Academy, Maccabaeon Lecture in Jurisprudence, London, May 14, 1981).

bility claims.⁸⁸ The American Restatement (Second) of Torts section 402A recognizes voluntary assumption of risk as a complete defense, but does not recognize contributory or comparative negligence as either full or partial defenses.⁸⁹ Various state courts and legislatures have espoused different positions — some have recognized contributory negligence as a complete defense,⁹⁰ more have recognized comparative negligence as a partial defense calling for apportionment,⁹¹ and some have viewed voluntary assumption of risk as merely a form of comparative negligence calling for apportionment but not a complete bar to recovery.⁹² Some of the difficulty surrounding these questions relates to whether it is conceptually appropriate to apportion liability under comparative negligence when this may seem to entail comparing incommensurables — the degree of fault on one side with strict liability on the other. Whatever the force of this conceptual difficulty, a majority of states in recent years appears to have converged around comparative rather than contributory negligence as a defense to strict liability actions.⁹³

Even more divergence exists concerning whether voluntary assumption of risk is merely an aspect of comparative negligence or an independent and complete defense. At least until recently, considera-

88. See Rogerson & Trebilcock, *Products Liability and the Allergic Consumer: A Study in the Problems of Framing an Efficient Liability Regime*, 36 U. TORONTO L.J. 52, 78-82 (1986).

89. RESTATEMENT (SECOND) OF TORTS § 402A (1965).

90. See *Reda Pump Co. v. Finck*, 713 S.W.2d 818 (Ky. 1986); *Waegli v. Caterpillar Tractor Co.*, 197 Neb. 824, 251 N.W.2d 370 (1977); *Butaud v. Suburban Marine & Sporting Goods, Inc.*, 543 P.2d 209 (Alaska 1975).

91. See, e.g., *Trust Corp. of Montana v. Piper Aircraft Corp.*, 506 F. Supp. 1093 (D. Mont. 1981); *Pan-Alaska Fisheries, Inc. v. Marine Const. & Design Co.*, 565 F.2d 1129 (9th Cir. 1977).

92. See, e.g., *Daley v. General Motors Corp.*, 20 Cal. 3d 725, 575 P.2d 1162, 144 Cal. Rptr. 380 (1978).

93. See *Trust Corp. of Montana v. Piper Aircraft Corp.*, 506 F. Supp. 1093 (D. Mont. 1981); *Edwards v. Sears, Roebuck & Co.*, 512 F.2d 276 (5th Cir. 1975); *Sun Valley Airlines, Inc. v. Avco-Lycoming Corp.*, 211 F. Supp. 598 (D. Idaho 1976); *Hagenbuch v. Snap-On Tools Corp.*, 339 F. Supp. 676 (D.N.H. 1972); *Butaud v. Suburban Marine & Sporting Goods, Inc.*, 555 P.2d 42 (Alaska 1976); *Daly v. General Motors Corp.*, 20 Cal. 2d 725, 575 P.2d 1162, 144 Cal. Rptr. 380 (1978); *West v. Caterpillar Tractor Co.*, 336 So. 2d 80 (Fla. 1976); *Busch v. Busch Const. Inc.*, 262 N.W.2d 377 (Minn. 1977); *Thibault v. Sears, Roebuck & Co.*, 118 N.H. 802, 395 A.2d 843 (1978); *Suter v. San Angelo Foundry & Mach. Co.*, 81 N.J. 150, 406 A.2d 140 (1979); *Baccelleri v. Hyster Co.*, 287 Or. 3, 597 P.2d 351 (1978); *Hamilton v. Motor Coach Ind., Inc.*, 569 S.W.2d 571 (Tex. 1978); *Berry v. Coleman Sys. Co.*, 23 Wash. App. 622, 596 P.2d 1365 (1979); *Dippel v. Sciano*, 37 Wis. 2d 443, 155 N.W.2d 55 (1967); *Mulherin v. Ingersoll-Rand Co.*, 628 P.2d 1301 (Utah 1981); *Fiske v. MacGregor*, 464 A.2d 719 (R.I. 1983); *Kaneko v. Hilo Coast Processing*, 654 P.2d 343 (Haw. 1982); *Bell v. Jet Wheel Blast*, 462 So. 2d 166 (La. 1985).

ble uncertainty has surrounded these questions and even now the apportionment of liability is a rather arbitrary and unpredictable exercise. Part of the conceptual difficulty lies in whether social insurance or deterrence objectives should motivate the nature of the defenses. If the former, one might attempt to replicate the sort of deductible and co-insurance provisions observed in voluntary, first-party insurance. If the latter, more extensive defenses might be required in order to create optimal incentives for efficient victim precautions, even though such defenses may leave the victim with sub-optimal insurance.

Causation

Causation issues have generated considerable uncertainty in a wide range of emerging areas of tort liability. These problems have been particularly acute in the cumulative trauma-toxic tort cases, other product liability cases, and environmental discharge cases.

For example, in asbestos litigation,⁹⁴ workers who have contracted asbestosis, mesothelioma, or cancer had been exposed to different sources of asbestos over large stretches of their working lives, often in different work settings. Given latency periods often as long as twenty to thirty years, identifying the particular source of asbestos which precipitated the worker's illness or death is impossible. Apart from this problem, other uncertainties are introduced: extraneous circumstances, for example, smoking, may have caused the plaintiff's condition or at least made him more susceptible to the health impacts of asbestos. Courts in different jurisdictions have adopted different, albeit arbitrary, causation rules to trigger liability. These have ranged from the first source of exposure, or the last source of exposure rule, to a rule making all manufacturers of asbestos to which the victim was or may have been exposed jointly and severally liable,⁹⁵ in effect allowing the victim to choose his defendant (typically the deepest pocket or best insured).⁹⁶

These uncertainties have parallels in the relationship between the defendant and his insurers.⁹⁷ In the case of standard occurrence-triggered comprehensive general liability insurance policies, where the

94. See, e.g., *Beshada v. Johns-Manville Prod. Corp.*, 90 N.J. 191, 447 A.2d 539 (1982); *Hammond v. North Am. Asbestos Corp.*, 105 Ill. App. 3d 1033, 435 N.E.2d 540 (1982); *Karjala v. Johns-Manville Prod. Corp.*, 523 F.2d 155 (8th Cir. 1975); *Borel v. Fibreboard Paper Prod. Corp.*, 493 F.2d 1076 (5th Cir. 1973).

95. *Borel v. Fibreboard Paper Prod. Corp.*, 493 F.2d 1076 (5th Cir. 1973).

96. For analyses of these difficulties, see Smith & Cuzmanes, *Insurance Protection — Product Liability*, 40 FOOD DRUG COSM. L.J. 112 (1985); Comment, *Insurance Coverage of Asbestos Claims — Running for Cover or Coverage*, 32 EMORY L.J. 901 (1983).

97. See K. ABRAHAM, *DISTRIBUTING RISK: INSURANCE, LEGAL THEORY, AND PUBLIC POLICY* (1986).

defendant may have been insured with different insurers over time, when does an injury "occur" so as to trigger liability under the policy? One theory espoused by some courts is that an injury occurs when the victim was exposed to asbestos dust ("inhalation exposure").⁹⁸ Another theory is that injury may occur during the latency and development of the disease ("exposure in residence").⁹⁹ Yet another theory is that injury does not occur until the disease has manifested itself.¹⁰⁰ A final theory (the so-called "triple-trigger" theory) views any of these three occurrences as triggering liability under an occurrence-based liability insurance policy with the insured defendant either being free to select the insurer from whom he seeks to obtain indemnification for any claim, or being required alternatively to apportion liability according to whatever fraction of total exposure time each insurer was at risk.¹⁰¹ Substantial and extremely complex secondary litigation between insureds and their insurers has now been spawned by the primary litigation between asbestos victims and asbestos manufacturers.¹⁰²

Joint and Several Liability

In various tort contexts, the doctrine of joint and several liability has been used to single out particular defendants to bear full liability for all losses suffered by victims, even though the defendants held liable were not the exclusive suppliers of the noxious products. This issue also has been particularly problematic under the U.S. Superfund legislation that imposes strict liability for cleanup on contributors to and operators of chemical waste storage sites. Even a contributor of one barrel of chemical waste conceivably may be held liable for the complete costs of cleanup if the harm or threatened harm from discharge is viewed as indivisible among sources. While

98. See Comment, *Asbestosis: Who Will Pay the Plaintiff?*, 57 TUL. L. REV. 1491, 1506 (1983); see also *Ins. Co. of N. Am. v. Forty-Eight Insulations, Inc.*, 633 F.2d 814 (6th Cir.), cert. denied, 454 U.S. 1109 (1981).

99. See Comment, *supra* note 96, at 922-27.

100. See Comment, *supra* note 98, at 1498-1506; see also *Eagle-Pitcher Ind., Inc. v. Liberty Mut. Ins. Co.*, 682 F.2d 12 (1st Cir. 1982), cert. denied, 103 S. Ct. 1279 (1983).

101. Comment, *supra* note 98, at 1510-14; see also *Keene Corp. v. Ins. Co. of N. Am.*, 667 F.2d 1034 (D.C. Cir. 1981), cert. denied, 455 U.S. 1007 (1982).

102. For accounts of these insurance complexities, see Note, *Products Liability Insurance Coverage*, 31 S.C.L. REV. 718 (1980); Comment, *supra* note 96; Mansfield, *Asbestos: The Cases and the Insurance Problem*, 15 FORUM 860 (1980); Comment, *supra* note 98; Smith & Cuzmanes, *supra* note 96, Pomerantz, *Products Liability Insurance in the New Industrial Revolution*, 1980 INS. L.J. 129; Note, *Adjudicating Asbestos Insurance Liability: Alternatives to Contract Analysis*, 97 HARV. L. REV. 739 (1984).

the particular defendant held jointly and severally liable may have a right to claim apportionment from other contributors, apportioning liability among perhaps hundreds of contributors poses enormous difficulties and uncertainties. Many of the contributors may have ceased contributing waste to the site twenty or thirty years before the action. Others since may have gone out of business or ceased to be identifiable; yet others may have few assets and little insurance.¹⁰³

The wild-card nature of joint and several liability and the incentives it creates to sue deep pocket or well-insured defendants also have created problems for municipalities and other local authorities. For example, defectively designed or constructed playground equipment that causes injury may have been supplied many years before the accident. If the municipality is found even slightly negligent in failing to maintain or replace the equipment or supervise the play area, it may find itself (or its insurers) bearing the full cost of the award unless it is able to secure effective indemnification from the equipment manufacturer. It should be noted that a similar rule applies in Ontario in the case of joint tortfeasors, but only in cases of "fault or neglect," thus arguably excluding cases of strict liability.¹⁰⁴

Statutes of Limitation and Repose

Severe uncertainty has surrounded the application of statutes of limitation and repose to many emerging areas of tort liability. In many instances, limitation periods in tort actions are tolled by the occurrence of the injury or damage for which relief is sought in the action.¹⁰⁵ However, in the cumulative trauma-toxic tort cases, unlike highway accidents, for example, the injury does not occur at a discrete moment in time. In the asbestos cases, it is not clear whether the injury occurs when the asbestos fiber is implanted in the victim's lungs (assumed to be initial exposure), when in retrospect it might have begun to turn cancerous, when the symptoms of the illness first were manifested to the victim, or when they were first discoverable, even if not observed by the victim. In medical malpractice claims involving birth defects from allegedly negligent prenatal care, when

103. For analyses of these difficulties, see Note, *The Comprehensive Environmental Response, Compensation and Liability Act of 1980: Is Joint and Several Liability the Answer to Superfund?*, 18 NEW ENG. L. REV. 109 (1982); Note, *Joint and Several Liability Under Superfund: The Plight of The Small Volume Hazardous Waste Contributor*, 31 WAYNE L. REV. 1057 (1985); Note, *Joint and Several Liability for Hazardous Waste Release under Superfund*, 68 VA. L. REV. 1157 (1982); Note, *Apportioning Damages Among Multiple Strict Tort Liability and Negligence Defendants: A Proposed System of Group Contribution*, 12 RUTGERS L.J. 309 (1981).

104. See Ontario Negligence Act, ONT. REV. STAT. ch. 296, § 2(1) (1970).

105. See RESTATEMENT (SECOND) OF TORTS § 899 comments e, g (1965); see also *Steele v. United States*, 599 F.2d 823, 826-28 (7th Cir. 1979); *Bolick v. American Barmag Corp.*, 306 N.C. 364, 293 S.E.2d 415, 417 (1982).

the injury occurs is unclear, given that its full manifestations may not be apparent until the child has reached adulthood and his or her incapacities have been fully revealed. In the DES litigation, it is unclear when the injury to the female offspring of the DES mothers occurs.

There is wide diversity among the legislation of various states and court decisions on these issues.¹⁰⁶ For a manufacturer supplying products in numerous markets (and his insurers), exposure to what are typically long-tail risks may vary dramatically from state to state, again substantially increasing uncertainty as to the extent of liability exposure.

Successor Liability

In the corporate setting, the doctrine of successor liability applies to asset acquisitions, but not to share acquisitions.¹⁰⁷ It is designed to prevent a firm faced with substantial tort claims from liquidating its assets and frustrating the claims. A purchaser of a corporation's assets assumes any liabilities or contingent liabilities that have been generated by those assets.¹⁰⁸ In most states the doctrine only applies where the acquiring firm continues to produce the product line that generated the liabilities when the assets were owned by the vendor.¹⁰⁹ In theory, the transfer of tort liabilities will lead a purchaser to discount the value of the assets and thus reduce the returns to the vendor from any attempt to frustrate tort claims by liquidating the assets. However, considerable legal uncertainty surrounds the parameters of the doctrine, particularly regarding the continuity of the same or similar product lines requirement. In the case of long-tail risks, purchasers of assets risk being exposed to claims remote in time whose existence and extent are difficult to determine.¹¹⁰

106. For discussions, see McGovern, *The Status of Statutes of Limitations and Statutes of Repose in Products Liability Actions: Present and Future*, 16 FORUM 416 (1981); Note, *Date-of-Sale Statutes of Limitation: An Effective Means of Implementing Change in Products Liability Law*, 30 CASE W. RES. L. REV. 123 (1979); Condon, *Product Liability — 1983*, 40 FOOD DRUG COSM. L.J. 127 (1985).

107. Phillips, *Products Liability of Successor Corporations: A Corporate and Commercial Law Perspective*, 11 HOFSTRA L. REV. 249, 249 n.1 (1982-83).

108. Phillips, *Product Line Continuity and Successor Corporation Continuity*, 58 N.Y.U. L. REV. 906, 907 (1983).

109. *Id.* at 918.

110. For discussions, see Roe, *Mergers, Acquisitions, and Tort: A Comment on the Problem of Successor Corporation Liability*, 70 VA. L. REV. 1559 (1984); Phillips, *supra* note 108; Schwartz, *Products Liability, Corporate Structure and Bankruptcy: Toxic Substances and the Remote Risk Relationship*, 14 J. LEGAL STUD. 689, 715, 716 (1985).

Quantification of Damages

As statistics noted previously have made clear, the escalation in average size of awards for bodily injury and wrongful death claims over recent years in the United States substantially exceeds the general inflation rate. Explanations offered for such rates of increase are, for the most part, unconvincing. One might argue that increases in economic productivity generate higher incomes over time, which, when foregone as a result of bodily injury or wrongful death, will be reflected in increasing damage awards over time. However, increases in productivity and income have not been nearly as great as the increase in damage awards. Indeed, increases in the productivity of labor in the United States since the early 1970s rarely have been lower and often are perceived as a major source of declining competitiveness in many sectors. Similarly, to the extent that damage awards are designed to compensate for future expenditures and therefore must account for expected inflation in these costs over time, the recent rates of increase in awards have far outstripped current rates of inflation and anticipated rates of inflation as reflected in current nominal interest rates. Indeed, current rates of inflation have fallen sharply from those prevailing several years ago, as have nominal interest rates, reflecting expectations of lower levels of inflation in the future. It also has been argued that rates of innovation in medical science have been extremely high in postwar years (since the discovery of antibiotics in the 1940s), and that therefore, the range of medical interventions that are technically possible, albeit often extremely expensive, to alleviate the consequences of bodily injury has broadened dramatically. While this argument may have some force, medical innovations that have occurred in the last several years which would account for substantial surges in the size of awards (as opposed to a gradual upward trend over time) are difficult to identify.

I do not have a robust explanation for this puzzle. Given the central damage-assessment role of juries in the United States, an articulation of reasons for size of awards is not compelled and therefore cannot readily be scrutinized. Perhaps analysis must resort to some deep sociological theory of changing community attitudes to risk-bearing, but what the nature of such a theory might be is beyond the reach of this author.¹¹¹ One line of inquiry perhaps worth pursuing is whether the presuppositions that Priest has argued have underlain the expansion of the parameters of liability are also driving increases in the quantum of liability.¹¹² Classical tort law and theory viewed

111. See Y. AHARONI, *THE NO-RISK SOCIETY* (1981); see also K. ABRAHAM, *supra* note 97, chs. 2 & 8.

112. See, e.g., Priest, *supra* note 13, at 1525.

rules governing determinations of liability and quantum as prior premises which then would inform decisions of private economic agents as to when it might or might not be appropriate to insure against the allocation of risks implied by these rules.¹¹³ However, in modern tort law and theory, this sequence of social and private calculi on liability and insurance has been inverted: the existence of insurance will, to a large extent, determine both the assignment of liability and the quantification of damage. If one party to a lawsuit is perceived as possessing superior insurance coverage or risk-bearing potential, this will tend to dictate both a finding of liability and a generous award of damages. After all, it is assumed that he will not bear the full brunt of either but will diversify the risks away in various ways. In this respect, the tort system becomes predominantly a form of social insurance for a wide range of societal risks. As will be developed more fully below, however, unlike other forms of social insurance with which we are familiar, such as workers' compensation, unemployment insurance, and social security disability benefits, where participation by cost-bearers and beneficiaries is mandated by law, the tort system does not compel the maintenance of the group insurance features of these other social insurance schemes.¹¹⁴ Low-risk consumers who do not wish to pay the high insurance premiums implicit in the price of certain products or services may drop out of these markets. Low-risk suppliers of goods or services who cannot identify themselves as such to third-party insurers also may drop out of these markets. High-risk suppliers who remain may find that consumers do not value the insurance they are required to provide with their products or services (for example, high-risk vaccines, intra-uterine birth control devices) sufficiently highly to make a tied sale of product/service and insurance economically viable. And third-party insurers may not find it economically viable to carry risks which cannot be accurately priced because of the very large variance in their potential exposures.¹¹⁵

Thus, the tort system as a form of social insurance cannot ensure that all cost-bearers and beneficiaries remain within the group being insured. At this point, any civil liability system that predicates both liability and quantum on the prior existence or availability of private insurance with respect to one of the parties is likely to become ran-

113. See Weinrib, *The Insurance Justification and Private Law*, 14 J. LEGAL STUD. 681 (1985).

114. See S. REA, *DISABILITY INSURANCE AND PUBLIC POLICY* 35, 36 (1981).

115. See Priest, *supra* note 13, at 1548-50.

dom and unprincipled because the key variable — who will insure and to what extent — is not one controlled by the courts and will be influenced heavily by the courts' determinations of liability and quantification of damage. Thus, a radical indeterminacy is introduced into the system because the existence and availability of insurance cannot be taken as a prior given from which liability and quantum can be inferred. The causation will frequently, perhaps typically, run the other way. But if this is so, determinations of liability and quantum logically must precede and be independent of decisions by private economic agents as to whether to insure and if so, to what extent. The insurance to liability sequence is unable to sustain any obvious legal equilibrium.

With these comments in mind, the problematic aspects of quantifying damage in United States tort law can be briefly reviewed. Very few of them reflect recent doctrinal innovations and thus, weakly explain the sharp increases in average damage awards in recent years. In this respect, the general explanation of the implications of a change in fundamental presuppositions of the tort system — from a sequence of liability to insurance to the revised sequence of insurance to liability — is the best theory that can be posited at this point.

Damages for Pain and Suffering

According to Priest, awards for pain and suffering and other non-pecuniary losses comprise an estimated average of 47.2% of tort damages. The percentage tends to be higher in very large awards involving serious injuries.¹¹⁶ While I have no data at hand that would permit a conclusion as to whether this component of tort awards has increased more sharply in recent years than other award components, this seems to be a widely-held impression. Whether accurate or not, the appropriateness of awarding substantial sums for pain and suffering has been increasingly challenged in recent years, especially in the law and economics literature. The argument is there made that in contrast to the third-party liability insurance involved, for example, in product liability and professional malpractice actions, one does not typically observe individuals buying first-party insurance coverage that extends to pain and suffering. The principal reason for this is that if insurance is designed to equalize money income over alternative states of the world, foregoing income in some time periods through the payment of premiums in order to secure an equal income stream in other time periods in the event of an accident may not be utility-maximizing if the nature of the damage is

116. *Id.* at 1553-60.

such that it cannot be alleviated by money.¹¹⁷ Thus, Priest points out that one rarely observes parents taking out insurance on their children's lives, because while the loss of a child may be the source of overwhelming grief, nothing money can do is likely to assuage that grief.¹¹⁸

Apart from this utility maximization argument against pain and suffering damages, it is also argued that moral hazard problems are particularly severe in this context because of difficulties of external verification of the extent of the losses.¹¹⁹ This may be a further reason why such coverage is not observed in first-party insurance contracts and constitutes a substantial source of uncertainty as to the extent of exposure for third-party insurers.

Thus, from an insurance perspective, awards for pain and suffering seem to make little sense. On the other hand, from a deterrence perspective, pain and suffering may entail very real losses for tort victims. In principle, the tortfeasor should be confronted with these costs if he and other prospective tortfeasors are to take fully into account all the social costs of their actions and be influenced by the legal system to avoid those actions that generate more social costs than benefits. This suggests an intractable trade-off between the social insurance and deterrence objectives of the tort system.¹²⁰ However, to the extent that the former perspective has dominated the trend toward the adoption of explicit or implicit forms of strict liability, the case for pain and suffering damages awards is weakened. Under the classical negligence system in which the dominant objective arguably is to deter socially inappropriate behavior, the case for retaining pain and suffering damages is much stronger.

Collateral Sources

Collateral benefits that accrue to the victim of an accident typically are not deducted from tort damage awards.¹²¹ These may include various publicly provided benefits such as medical benefits, social security payments, and unemployment insurance benefits, as

117. See Zeckhauser, *Coverage for Catastrophic Illness*, 21 PUB. POL'Y 149 (1973); Cook & Graham, *The Demand for Insurance and Protection: The Case of Irreplaceable Commodities*, 91 Q.J. ECON. 143 (1977); Shavell, *Theoretical Issues in Medical Malpractice*, in *THE ECONOMICS OF MEDICAL MALPRACTICE* (S. Rottenberg ed. 1978); Rea, *Non-Pecuniary Loss and Breach of Contract*, 11 J. LEGAL STUD. 35 (1982).

118. Priest, *supra* note 13, at 1546-47.

119. *Id.*

120. S. REA, *supra* note 114, at 35, 36.

121. D. DOBBS, *HANDBOOK ON THE LAW OF REMEDIES* 181-86 (1973).

well as privately contracted benefits such as the proceeds from life insurance or disability policies. In many cases, obviously, this means "double" recovery for the victim. Excessive awards are thus viewed as a consequence.

However, like the rule regarding pain and suffering awards, this rule has obtained historically, so that recent increases in the size of average awards cannot readily be attributed to it. The case for abolition of the collateral source rule is that the tort system was not designed to provide plaintiffs with "windfall" gains, but to compensate them for actual losses incurred. Requiring collateral benefits to be deducted from tort awards is likely to reduce both the frequency and the severity of claims. This in turn would reduce the costs of insuring against the risk of such claims.¹²² As a result, pursuing smaller claims that are adequately covered by collateral sources will cease to be worthwhile for plaintiffs. Also, the size of awards in larger claims will be reduced significantly.¹²³

Unfortunately, as with the case of pain and suffering, the issue is not as straightforward if one shifts from the social insurance to the deterrence perspective. Optimal deterrence of socially inappropriate behavior can only be achieved by confronting prospective tortfeasors with the full social costs of their potential wrongdoing. Requiring the deduction of collateral benefits from tort awards and removal of any right of subrogation in the source of the benefits would attenuate incentives to act wrongfully. Moreover, such a rule is likely to have second-order incentive effects on the victim's side of the equation. For example, if in wrongful death actions the proceeds of life insurance policies are required to be deducted from tort awards, the victims are, in effect, paying to insure wrongdoers against the consequences of their wrongdoing. It would seem totally irrational for potential victims to engage in this kind of altruism. One might well predict that if the present collateral source rule were abolished and collateral benefits were deducted automatically from tort awards with no right of subrogation in the insurer, life insurance companies would offer lower premium policies that excluded coverage in cases of wrongful death. In such event, the new legal rule would have been circumvented by contract. From the point of view of the victim and his dependents, however, this may be a less satisfactory contract than current life insurance policies which guarantee a fixed sum on death. With the exclusion of coverage for wrongful death in reformulated life insurance policies, the victim's dependents bear the risks of judicial misestimation of their damages or at least uncertainty in

122. See generally Danzon, *New Evidence*, *supra* note 30; P. DANZON, *MEDICAL MALPRACTICE*, *supra* note 57.

123. See generally Danzon, *New Evidence*, *supra* note 30.

this respect, as well as legal enforcement costs, which *ex hypothesi* they would prefer to avoid, as evident in their choice of fixed sum insurance contracts rather than contracts of indemnity.

Punitive Damages

While punitive or exemplary damages have always been recoverable in United States tort law, traditionally something in the nature of fraud or wanton recklessness or indifference to another's safety or welfare was required before such damages would be justified.¹²⁴ As a result, punitive damages rarely were awarded. In the last decade, however, punitive damage awards in products liability and other tort contexts have become more common. Juries typically determine, as in other aspects of liability and quantum determinations, whether punitive damages should be awarded, and if so, in what amount.¹²⁵

Perhaps the most spectacular award of punitive damages in recent years was an award of \$125 million in 1978 against Ford Motor Company for continuing to market the Ford Pinto when company officials knew that the location of the gas tank made it prone to explosion in the event of rear-end collisions.¹²⁶ The plaintiff, a young teenager, was gravely injured and burned in such a collision.¹²⁷ Ford acknowledged that it was aware of this risk; however, internal cost-benefit analyses indicated that the costs of redesigning the gas tank exceeded the injury costs to victims which would result from leaving the tank as it was.¹²⁸ The jury apparently considered that Ford had deliberately condoned the accident that had occurred. The verdict was reversed on appeal and punitive damages were reduced to \$3.5 million.¹²⁹ Other cases have involved an award of \$5 million in punitive damages against Honda for designing a "diminutive" car that it knew was not "crashworthy",¹³⁰ a \$6.2 million award against A.H. Robins, the manufacturer of Dalkon intra-uterine shields,¹³¹ and an award against American Motors Corporation for failure to crash-test

124. K. REDDEN, PUNITIVE DAMAGES § 2.6 (1980).

125. *Id.* § 3.4(a).

126. *Grimshaw v. Ford Motor Co.*, 119 Cal. App. 3d 757, 174 Cal. Rptr. 348 (1981).

127. *Id.* at 771, 174 Cal. Rptr. at 358.

128. *Id.* at 777, 174 Cal. Rptr. at 361-62.

129. *Id.* at 771-72, 174 Cal. Rptr. at 358.

130. *Dorsey v. Honda Motor Co.*, 655 F.2d 650, 654-55 (5th Cir. 1981), *reh'g denied, opinion modified*, 670 F.2d 21 (5th Cir.), *reh'g denied*, 673 F.2d 911 (5th Cir.), *cert. denied*, 459 U.S. 880 (1982).

131. *Palmer v. A.H. Robins Co.*, 684 P.2d 187 (Colo. 1984).

a Jeep for durability of its rollbar in a forward pitch-over.¹³²

The potential for the award of punitive damages poses two major uncertainties. First, the standard which must be satisfied in order to trigger an award has ceased to be certain. Second, the basis on which such damages will be quantified is unclear. Other objections relate to the windfall nature of the award to the plaintiff; whether multiple punitive damage awards should be awarded for multiple sales of defective products, or if not, whether the first to the courthouse door should be required to share the award with subsequent litigants; and the lack of procedural safeguards comparable to those of the criminal law if punishment is the chief rationale for such awards.¹³³

Other uncertainties surround the application of general liability insurance coverage to this contingency. Most state courts interpret policies so as to exclude coverage for deliberate acts of wrongdoing, such as arson. In the case of punitive damages, some states have interpreted standard comprehensive general liability policies as including coverage for punitive damages; other states have held this to be contrary to public policy.¹³⁴ Still others have attempted to distinguish punitive damages awarded in cases analogous to the arson example where insurance is not permitted, from other punitive damage awards, where the behavior at issue is less egregious.¹³⁵ There are also uncertainties as to which jurisdiction determines the insurability of punitive damages — the state where the policy was issued or the state where the tort was committed.¹³⁶

Critics of punitive damages would (a) abolish them altogether; (b) limit them to some set multiple of actual damages; (c) have all or most of them remitted to the state; (d) have juries only determine liability for punitive damages and have judges alone determine quan-

132. *Leichtamer v. American Motors Corp.*, 67 Ohio St. 2d 456, 424 N.E.2d 568 (1981); see Owen, *Problems in Assessing Punitive Damages Against Manufacturers of Defective Products*, 49 U. CHI. L. REV. 1 (1982); Sales, *The Emergence of Punitive Damages in Product Liability Cases*, 14 ST. MARY'S L.J. 351 (1983).

133. See Owen, *supra* note 132, at 52-59.

134. K. REDDEN, *supra* note 124, § 9.4; see also Levit, *Punitive Damages: Yesterday, Today and Tomorrow*, 1980 INS. L.J. 257, 262-63. According to Professor Redden, the leading cases on either side are *Northwestern Nat'l Casualty Co. v. McNulty*, 307 F.2d 432, 440-41 (5th Cir. 1962) (public policy prohibits insurance coverage for punitive damages because the defendant gains a certain freedom of misconduct inconsistent with the punishment aspect of punitive damages), and *Lazenby v. Universal Underwriters Ins. Co.*, 214 Tenn. 639, 647, 383 S.W.2d 5 (1964) (the closing of the insurance market for punitive damages would be the result of judicial speculation concerning the deterrence value of such an action). The trend has been to follow the *Lazenby* rationale. K. REDDEN, *supra* note 124, § 9.4. See also Note, *Insurance for Punitive Damages: A Reevaluation*, 28 HASTINGS L.J. 431 (1976).

135. K. REDDEN, *supra* note 124, § 9.5.

136. See Pomerantz, *supra* note 94; Hagner, *Punitive Damages — Insurance and Reinsurance*, 47 INS. COUNS. J. 72 (1980).

tum; and (e) define more stringently the criteria which will justify punitive damages.¹³⁷

Other critics argue that punitive damages have been awarded relatively infrequently by trial courts and often then have been overturned or reduced on appeal.¹³⁸ Moreover, they argue that an economic justification exists for awarding punitive damages in cases of manufacturers' fraudulent concealment from consumers of the dangers inherent in their products and in cases of reckless conduct. They view both as forms of intentional torts where efficiently structured incentives for revelation or less careless conduct require a multiple of actual damages.¹³⁹ Here again a tension exists between the social insurance and deterrence objectives of the tort system. On insurance grounds, punitive damages cannot be justified — victims would not insure themselves for more than their losses. On deterrence grounds, however, punitive damages might sometimes be required in order to create appropriate incentives to deter socially undesirable behavior. This tension is exacerbated when strict liability is the primary regime chosen to govern liability, for social insurance reasons, when for deterrence reasons some other basis of liability is appropriate. To require courts or juries to keep insurance and deterrence objectives rigorously separated in their minds in adjudicating the different components of damage awards where one or the other of these objectives dominate may be to require a degree of analytical virtuosity that the system cannot reasonably bear.

As will have become increasingly apparent, the two objectives cannot, in many respects, be reconciled within the framework of a single legal instrument — in this case a civil liability regime. Pain and suffering damages may be justified for deterrence reasons but not for insurance reasons. Collateral benefits perhaps should be deducted from awards for insurance reasons, but not for deterrence reasons. Punitive damages should not be awarded for insurance reasons, but should, in some cases, be awarded for deterrence reasons. A single legal instrument is incapable of resolving in any obvious and principled way these competing objectives. The increasing instability of the United States tort system reflects a deep ambivalence about which of these objectives should govern either in general or in partic-

137. See K. REDDEN, *supra* note 124, § 2.4. For an argument that judges alone should decide the amount of a punitive damages award, see Sugarman, *Serious Tort Law Reform*, 24 SAN DIEGO L. REV. 795, 830 (1987).

138. Landes & Posner, *A Positive Economic Analysis of Products Liability*, 14 J. LEGAL STUD. 535, 563-66 (1985).

139. *Id.*

ular contexts. Short of a meta-choice on this fundamental issue of the central predicate of the tort system, instability and uncertainty will continue to pervade the system, as courts oscillate between the two objectives in resolving both determinations of liability and quantifications of damage, resulting in correlative instability and uncertainty in associated private insurance markets.

Psychic Harm

An emerging potential head of damage, not sharply different from pain and suffering, is that of psychic harm. For example, some DES mothers have (so far unsuccessfully) claimed that emotional stress induced by their concerns over their daughters' present or potential health problems should be compensated even though the primary victim is the child.¹⁴⁰ These claims are different from those for pain and suffering damages where the claimant is the primary victim.

Again, the familiar tension arises. For deterrence reasons, it may be important to confront the tortfeasor with these social costs, which may well be real. However, the deterrence case for determining liability on the basis of strict liability or some extremely expansive theory of negligence that is tantamount to *de facto* strict liability is difficult to sustain. For insurance reasons, it seems inappropriate to allow recovery for this kind of loss. As a nonpecuniary loss, it is irrational to insure against because it cannot be mitigated by money, and because moral hazard problems that render it extremely difficult to verify the extent of the damage may make such insurance, if offered voluntarily on a first-party basis, so prohibitively expensive that risk-bearers would prefer not to insure against it. Requiring tort defendants to provide insurance to third parties for this form of loss, as with pain and suffering damages, again confronts them and their insurers with substantial uncertainty regarding the extent of their exposure.

Workers' Compensation Benefits

The general position that obtains in most states in the United States is that an employee's benefits are his exclusive remedy against his employer, but the employee is free to sue third parties (for example, upstream manufacturers of products that have caused injury) for full tort measures of damage.¹⁴¹ In the event of recovery, the employer has a lien on the recovery for workers' compensation benefits paid or payable and in some states the third-party tort defendant

140. See, e.g., *Swiss v. Eli Lilly & Co.*, 559 F. Supp. 622 (D.R.I. 1983).

141. Epstein, *Coordination of Workers' Compensation Benefits with Tort Damage Awards*, 13 FORUM 464, 465 (1978) [hereinafter Epstein, *Workers' Compensation Benefits*].

may have a right of contribution or indemnity against the employer in the event of the latter's negligence.¹⁴² Some states limit a defendant's right to contribution or indemnity to the amount of the workers' compensation lien; others allow it up to the amount of the employee's judgment against the third party.¹⁴³ In most states, an employer insures privately for his no-fault liabilities to his employees.¹⁴⁴

This system contrasts with that of many other common law jurisdictions, where either (1) employee actions against third parties for accidents arising out of or in the course of his employment are totally foreclosed (as in Ontario) or (2) the employee must elect between workers' compensation benefits and tort recovery sometime prior to determination of the latter.

A significant percentage of recent United States product liability cases arise out of accidents or exposures in the workplace. Historically, such cases typically were confined to such instances as when a manufacturer's defective machinery caused injury to an employee. These cases have become much more prominent recently in the more complicated context of mass toxic exposures, such as asbestos exposure.

It is argued that allowing employees unqualified rights of action against third parties without requiring subtraction of workers' compensation benefits from awards unnecessarily inflates awards and therefore the associated third-party insurance premiums.¹⁴⁵ In addition, in the case of long-tail risks like asbestos, it is argued that allowing third-party claims exposes third-party defendants and their insurers to high levels of uncertainty and problems of insurability.¹⁴⁶

The current system reflects the basic ambivalence between deterrence and insurance objectives that has been noted in other contexts. Historically, workers' compensation schemes were designed to provide a basic level of insurance to injured workers. Recovery was not contingent on proof of negligence by employers or fellow workers; employees could supplement their coverage through first-party insurance.¹⁴⁷ Deterrence objectives with respect to employers and employ-

142. *Id.*

143. *Id.* at 465.

144. See A. LARSON, *WORKMEN'S COMPENSATION* § 92-93 (Desk ed. 1980).

145. O'Connell, *An Immediate Solution to Some Products Liability Problems: Workers' Compensation as a Sole Remedy for Employees, with an Employer's Remedy Against Third Parties*, 1976 *INS. L.J.* 683, 685.

146. *Id.* at 685.

147. See generally Epstein, *The Historical Origins and Economic Structure of*

ees are not central to these systems. In return for a no-fault or strict liability basis for recovery, workers receive medical expenses and economic losses determined in accordance with pre-determined schedules. Nonpecuniary losses are not recoverable, other collateral benefits are not deductible (thus encouraging higher-income workers to purchase their own market insurance for additional coverage), and punitive damages obviously are not recoverable. To the extent that deterrence objectives are accorded any weight in the system, this is reflected in various experience-rating systems applied to classes of employers. In general, this has not been a prominent feature of the system, and promotion of work-place safety has been left, in part, to the collective bargaining process and to an increasing extent to public occupational health and safety regulatory regimes.

The United States workers' compensation system, however, presumably in the interests of deterrence, has preserved an employee's tort action against third-party defendants.¹⁴⁸ But as the liability of third-party defendants in a product liability context increasingly sounded in strict liability, presumably for social insurance reasons, one insurance scheme has simply been layered on top of another. The second scheme (between worker and third-party defendant), of course, exhibits few of the features of the first in terms of limiting recovery to heads of damage that workers voluntarily would want to insure against; however, it yields a form of coverage for which they are ultimately required to pay in the form of wage reductions. To complete the circle of incoherence, third-party defendants (often held strictly liable to workers, as in the asbestos cases, for social insurance reasons) are permitted to sue the worker's employer for contribution or indemnity (a cost of labor in addition to workers' compensation premiums) in the event of the latter's negligence,¹⁴⁹ presumably to ensure that at the end of the chain the employer bears some civil responsibility for the consequence of his negligence towards his employee. If this had been a major objective of the system, why not simply have allowed the employee to sue the employer for negligence in the first place and recover full (not scheduled) damages against him? Because, presumably, this would provide inadequate insurance to workers where the employer's negligence could not be proved, but where the worker's financial needs were as acute as in cases where negligence could be demonstrated. The nature of the economic bargain between employers and employees embodied in workers' compensation schemes seems clear: in return for making the question of the negligence of an employer, fellow employees, and

Workers' Compensation Law, 16 GA. L. REV. 775 (1982).

148. See Epstein, *Workers' Compensation Benefits*, *supra* note 141.

149. *Id.*

an injured employee irrelevant, employees agreed to accept a lower schedule of compensation in the event of injury than the tort system would provide.¹⁵⁰

The current United States workers' compensation system highlights the conceptual importance of separating the issues bearing on the design of optimal insurance and optimal deterrence regimes. Any single legal instrument cannot perform both objectives optimally and trade-offs between the objectives are likely to be murky, unstable, or incoherent.

In an analysis of the relationship between workers' compensation benefits and tort damage awards, Epstein argued that the appropriate course of reform was to preserve workers' third-party claims, deduct from tort awards workers' compensation benefits paid or payable, abolish the employer's lien on workers' tort awards, and abolish actions for indemnity or contribution by third parties against employers. He rejected the simple expedient of abolishing all third-party actions by injured workers as of "little merit" because of its blanket protection of manufacturers and suppliers of defective products who would face attenuated incentives to improve the safety of their products.¹⁵¹ However, in a later revisitation of the issues in the context of the subsequent asbestos litigation, Epstein seems to be open to this possibility: "One radical way to return to the compensation system is to bar all tort actions against suppliers. While this may seem radical within the American system, it represents the uniform practice in every other industrialized country."¹⁵²

If such a course were followed in the United States, the scale of benefits provided would need to be reviewed to ensure that they reflected optimal basic insurance. Similarly, the tort system could no longer be looked to for a deterrence function. Other instruments, principally regulatory, would have to provide methods of deterring employer and third-party manufacturer negligence. However, at that point, we would have ceased to ask the tort system to perform the impossible task of promoting socially optimal insurance and deterrence objectives simultaneously through a single instrument.

150. See Epstein, *supra* note 147, at 800-01.

151. Epstein, *Workers' Compensation Benefits*, *supra* note 141, at 470.

152. Epstein, *Manville: The Bankruptcy of Product Liability Law*, REGISTER 14, 46 (Sept./Oct. 1982).

RECENT TRENDS IN CANADIAN TORT LAW

This section attempts to highlight general trends in Canadian tort law that suggest that its central impulses have become increasingly congruent with those reflected in recent United States trends, despite the formal differences in the two systems.

Determinations of Liability

Many judges, even within a negligence regime, are influenced by the revised sequence of insurance to liability (rather than liability to insurance) in making determinations of negligence. Mr. Justice Horace Krever, a prominent member of the Ontario Court of Appeal and a former legal academic, recently told a University of Manitoba audience that judges sometimes practice "intellectual dishonesty" and make findings of negligence even if there was none because that is the only way a plaintiff can be compensated.¹⁵³ Recent cases such as the widely publicized trial court decision in *McErlean v. Municipality of Brampton*,¹⁵⁴ are often cited as exemplifying this proclivity. In *McErlean*, a fourteen year old youth was gravely injured when the trail bike he was riding slammed into another youth's trail bike at high speed on a blind corner of a gravel road on undeveloped parkland owned by the municipality. The municipality was found mostly responsible for the accident for not taking better precautions to safeguard an area that had such obvious attractions for youngsters. The youth was awarded \$6.3 million. The decision recently has been overturned by the Ontario Court of Appeal both on liability and quantum.¹⁵⁵ In another recent case, *Biancale v. Petro-Lon Canada Limited*,¹⁵⁶ Justice Henry of the Ontario Supreme Court described his approach to the product liability of a manufacturer as follows:

In my opinion, the time has come to extend the policy of the law so that the plaintiff is not obliged to prove negligence on the part of the defendant which may be a difficult and costly burden to discharge; in such circumstances, negligence becomes virtually a presumption, if not a judicial fiction.¹⁵⁷

Other recent cases in the products liability context also tend to support the "Krever" hypothesis. With respect to manufacturers' warning defects, recent Canadian negligence decisions appear to

153. Toronto Globe & Mail, Apr. 17, 1986, at B21; see generally Glasbeek & Hasson, *Fault — The Great Hoax*, in *STUDIES IN CANADIAN TORT LAW* (L. Klar ed. 1977).

154. 32 C.C.L.T. 199 (1985); see the Slater Task Force's discussion of *McErlean* in *SLATER TASK FORCE REPORT*, *supra* note 8, at 53-54.

155. Ont. Ct. App., Sept. 19, 1987 (unreported as of Oct. 21, 1987).

156. Ins. L. Rep. (CCH) ¶ 92,544 (Ont. 1986).

157. *Id.*

reach results similar to those reached in United States strict liability decisions (with the exception of the *Beshada*¹⁵⁸ holding of liability for unknowable risks, in the absence of warnings, for which there is no Canadian doctrinal counterpart). For example, in *Lambert v. Lastoplex Chemicals Company*,¹⁵⁹ a qualified engineer suffered personal injuries when vapors from a liquid floor sealant he was using in an enclosed room were ignited by a furnace pilot light in an adjoining room. The Supreme Court of Canada held that the engineer was entitled to recover damages for his injuries from the manufacturer of the floor sealant. While the product contained a prominent warning that it was highly flammable and should not be used near open flames, the court held that this was not sufficiently explicit to alert the plaintiff to the risk of ignition from sources as remote as pilot lights in furnaces.¹⁶⁰

In another case, *Buchan v. Ortho Pharmaceutical (Canada) Limited*,¹⁶¹ the Ontario Court of Appeal held the manufacturer of birth control pills liable to the plaintiff who suffered a stroke as a result of blood-clotting, to which she was peculiarly susceptible because of a prior health condition. The fact that the product contained a warning advising users to consult their physicians before use to establish whether there might be risks of side effects, and that physicians, including the plaintiff's physician, had been alerted by a government information circular to the particular risks involved, was held not to discharge the defendant's obligation to provide explicit warnings itself of the increased risk of strokes attendant with use of the pill to either users or physician intermediaries. The fact that the warning attached to the product and the separate and somewhat more extensive warning disseminated by the defendant to prescribing physicians complied with the warning requirements under applicable regulations of the federal Food and Drug Act was held to be irrelevant. The plaintiff was awarded over \$600,000 in damages.¹⁶²

Recent cases involving the liability of manufacturers or sellers of defective products have taken a very restrictive view of the scope of limitations of liability contained in express warranty undertakings.¹⁶³

158. *Beshada v. Johns-Manville Prod. Corp.*, 90 N.J. 191, 447 A.2d 539 (1982).

159. 1972 S.C.R. 569 (1972); see also *Cominco Ltd. v. Canadian Gen. Elec. Co.*, 147 D.L.R.3d 279 (B.C. C.A. 1983).

160. *Lambert*, 1972 S.C.R. at 575.

161. 25 D.L.R.4th 658, 54 O.R.2d 92 (Ont. C.A. 1986).

162. 8 D.L.R. 4th 373, 411, 46 O.R.2d 113, 151 (1984).

163. See, e.g., *McNichol v. Dominion Motors Ltd.*, 24 A.L.R. 441 (1930) (applying *Wallis, Son & Wells v. Pratt & Haynes*, 1911 A.C. 394).

Other cases often have held such limitations or exclusions inoperative, often pursuant to the doctrine of fundamental breach, leaving a manufacturer liable either for negligence, or *de facto* strictly liable on the basis of the core formal undertakings in the express warranties from which the limitations have been judicially excised.¹⁶⁴ This doctrine has even been applied to disclaimer clauses in contracts between substantial commercial entities.¹⁶⁵ The current scope of the fundamental breach doctrine is highly confused,¹⁶⁶ and, like the state of the warning defect rules, is the source of a great deal of uncertainty as to when a product manufacturer has or has not effectively shifted a risk by notice or contract.

A further area of uncertainty in the products liability context is whether manufacturers or remote suppliers of defective products are liable to remote parties for "pure" economic loss, even if negligence is proved. The complex, not to say obscure, decision of the majority of the Supreme Court of Canada in *Rivtow Marine Limited v. Washington Iron Works*¹⁶⁷ appears to recognize only a very limited ambit of recovery for economic losses, while Justice Laskin, as he then was, would have countenanced more liberal recovery. In taking this view, it is significant that Justice Laskin expressly relied, in part, on a social insurance rationale: "[Manufacturers] are better able to insure against such risks, and the cost of insurance, as a business expense, can be spread with less pain among the buying public than would be the case if an injured consumer or user was saddled with the entire loss that befalls him."¹⁶⁸ The similarity of language with that of Justice Traynor of the California Supreme Court in his oft-quoted statement in *Escola v. Coca Cola Bottling Company*,¹⁶⁹ justifying the adoption of strict liability, is striking: "The cost of an injury and the loss of time or health may be an overwhelming misfortune to the person injured, and a needless one, for the risk of injury can be insured by the manufacturer and distributed as a cost of doing business."¹⁷⁰ Whether in Canada manufacturers or suppliers of defective products will be liable to remote parties in tort for pure economic loss has been rendered even more uncertain as a result of

164. See, e.g., *Chabot v. Ford Motor Co.*, 138 D.L.R.3d 417, 39 O.R.2d 162 (Ont. High Ct. of Justice 1983).

165. See, e.g., *R.G. MacLean Ltd. v. Canadian Vickers Ltd.*, 15 D.L.R.3d 15 (Ont. C.A. 1970); *Canso Chems. Ltd. v. Canadian Westinghouse Co.*, 54 D.L.R.3d 517 (N.S. App. Div. 1974).

166. See, e.g., *George Mitchell (Chesterhall) Ltd. v. Finney Lock Seeds Ltd.*, 3 W.L.R. 1036 (C.A. 1982); *Photo Production Ltd. v. Securicor Transp. Ltd.*, App. Cas. 827 (1980); *Beaufort Realities Inc. v. Chomedey Aluminum Co.*, 116 D.L.R.3d 193 (1964).

167. 40 D.L.R.3d 530 (Can. 1973).

168. *Id.* at 552.

169. 24 Cal. 2d 453, 150 P.2d 436 (1944).

170. *Id.* at 462, 150 P.2d at 440.

the recent decision of the majority of the House of Lords in *Junior Books Limited v. Veitchi Company Limited*,¹⁷¹ which adopted and extended the scope of Justice Laskin's dissent in *Rivtow*, although yet more recent decisions suggest some judicial retrenchment.¹⁷²

In the transition to what may be a new judicial equilibrium, considerable uncertainty is likely to afflict insurance markets that are attempting to predict and price socio-legal risk. Moreover, as noted in the previous section, even if the transition from negligence to strict liability is formally or explicitly acknowledged, strict liability is itself an inherently unstable regime that cannot readily be kept conceptually distinct from absolute liability. Indeed, to a greater extent than is often appreciated, a number of Canadian jurisdictions have moved substantially toward explicit adoption of principles of strict liability in the context of both products liability and environmental waste discharges. In *General Motors Products of Canada Limited v. Kravitz*,¹⁷³ the Supreme Court of Canada unanimously held an automobile manufacturer strictly liable for "latent defects" to the ultimate purchaser of the automobile under the Quebec Civil Code, holding that General Motors' implied warranty against latent defects in favor of the dealer ran with the car to subsequent purchasers. Both limitations on liability in the contract between the dealer and the plaintiff and in General Motors' formal warranty were held void. The reasoning and result in this case are strikingly similar to that in the landmark decision of the New Jersey Supreme Court in *Henningsen v. Bloomfield Motors*,¹⁷⁴ in which the principle of nondisclaimable strict liability was espoused in similar circumstances. Whether the decision in *Kravitz* extends to personal injuries (in *Kravitz* the plaintiff merely sought recovery of the purchase price on account of the defects),¹⁷⁵ and whether the Supreme Court of Canada will take a similar view in cases arising in common law jurisdictions, remain continuing sources of debate and uncertainty.

Beyond these judicial developments, three provinces — Quebec, Saskatchewan and New Brunswick — in recent years have adopted by legislation the principle of nondisclaimable strict liability of man-

171. 1 App. Cas. 520 (Scot. 1983); see also *Kamloops v. Nielsen*, 2 S.C.R. 2, 10 D.L.R.4th 641 (1984).

172. See Feldthusen, *Economic Loss: Where Are We Going After Junior Books?*, 12 CAN. BUS. L.J. 241 (1987).

173. 1 S.C.R. 790, 93 D.L.R.3d 481 (1979).

174. 161 A.2d 69 (N.J. 1960).

175. 1 S.C.R. at 790, 93 D.L.R. at 481.

ufacturers of defective products sold for consumer uses.¹⁷⁶ The Ontario government introduced similar legislation into the provincial legislature in 1976,¹⁷⁷ pursuant to recommendations by the Ontario Law Reform Commission favoring the adoption of strict products liability of manufacturers in consumer transactions.¹⁷⁸ The legislation was abandoned, however, in the face of strong objections by local manufacturers, and pending inter-provincial efforts to reach agreement on uniform consumer products liability legislation. More recently, the Ontario Law Reform Commission, in its 1979 Report on Products Liability, recommended the adoption of nondisclaimable strict products liability for all manufacturers of defective products (not confined to consumer goods), other than for damage to property used in the course of carrying on a business and for pure economic loss. The Report contained a Draft Model Bill, upon which the government has not yet acted.¹⁷⁹

Outside the products liability context, Ontario recently has imposed strict liability for environmental waste discharges upon owners of substances that pollute and upon persons in control of substances that pollute.¹⁸⁰ The so-called "Spills Bill" imposes wide-ranging forms of strict liability on owners or controllers of toxic substances for clean up and restoration costs, as well as for other property damage claims, bodily injury claims, and pure economic loss claims.¹⁸¹ This controversial piece of legislation already has precipitated serious problems of insurability for toxic waste owners and carriers. The analogies between it and the United States Superfund legislation will be obvious.

In another report of the Ontario government's Law Reform Commission — its 1982 Report on Class Action Procedures — extensive recommendations and a Draft Model Bill were proposed for substantially liberalizing class action procedures to permit the aggregation of individual claims and to provide financial incentives for the bringing of such actions through contingent fee arrangements, hitherto prohibited in civil litigation in Ontario.¹⁸² These proposals are strongly influenced by United States experience with class actions,

176. See the Quebec Consumer Protection Act, QUE. REV. STAT. ch. P-40 (1977); the Saskatchewan Consumer Products Warranties Act, SASK. STAT. ch. C-30 (1978); and the New Brunswick Consumer Product Warranty and Liability Act, N.B. REV. STAT. ch. C-18.1 (1978).

177. Ontario Consumer Product Warranties Act, ONT. REV. STAT. ch. 87 (1980).

178. See ONTARIO LAW REFORM COMM'N, REPORT ON CONSUMER PRODUCT WARRANTIES (1972).

179. ONTARIO LAW REFORM COMM'N, REPORT ON PRODUCTS LIABILITY (1979).

180. Environmental Protection Act, ONT. REV. STAT. ch. 141, §§ 79-112 (1980) (proclaimed in force Nov. 29, 1985); for commentary thereon, see S. MAKUCH, THE SPILLS BILL: DUTIES, RIGHTS AND COMPENSATION (1986).

181. ONT. REV. STAT. ch. 141, §§ 79-112 (1980).

182. ONTARIO LAW REFORM COMM'N, REPORT ON CLASS ACTIONS (1982).

especially under Rule 23 of the Federal Rules of Civil Procedure.¹⁸³ If adopted, the proposed procedures presumably would have similar impacts in facilitating mass tort or contract claims in areas such as consumer and environmental protection in circumstances where often it has not been feasible for aggrieved individuals to prosecute such claims. A significant increase in the incidence of a variety of types of claims should therefore be anticipated under such legislation. In 1982, Quebec adopted substantial amendments to its Code of Civil Procedure to facilitate class actions, but rather than rely on enhanced private incentives such as contingent fees for bringing such actions, it set up a public fund out of which the costs of bringing class actions can be financed.¹⁸⁴

Quantification of Damages

The contentious issues in quantification of damages in Ontario in many respects track those that have proven problematic in the United States (with the exception of punitive damages, which are rarely awarded in tort claims in Canada), and much of the discussion of these issues in the previous section is apposite.

With respect to pain and suffering damages, three decisions of the Supreme Court of Canada in 1978 — the so-called judicial trilogy — established a ceiling of \$100,000 (inflation-indexed) for all pain and suffering awards in personal injury actions.¹⁸⁵ As noted earlier, restrictions on pain and suffering awards, even perhaps their complete elimination, can be justified on insurance grounds, although on deterrence grounds tortfeasors should be confronted with the full social costs of their actions, in which case full pain and suffering damages should be retained.

Continuing ambivalence on this question, despite the Supreme Court's holdings, is reflected in two recent developments. First, section 60 of the Ontario Family Law Reform Act of 1978, repealing the Fatal Accidents Act, provides that a wide range of relatives of the victim of an accident can recover not only pecuniary losses but also damages for loss of "care, guidance and companionship," not

183. FED. R. CIV. P. 23.

184. QUE. CLASS ACTION RULES L.Q., ch. 37, arts. 20-25 (1982); discussed by Lauzon, *Le Recours Collectif Quebecois: Description et Bilan*, 9 CAN. BUS. L.J. 324 (1984).

185. *Andrews v. Grand & Toy Alberta Ltd.*, 2 S.C.R. 229, 83 D.L.R.3d 452 (1978); *Thornton v. School Dist. No. 57 (Prince George)*, 2 S.C.R. 267, 83 D.L.R.3d 480 (1978); *Arnold v. Teno*, 2 S.C.R. 287, 83 D.L.R.3d 609 (1978); see also *Housecroft v. Burnett*, 1 All E.R. 332 (C.A. 1986).

only in fatal accident cases but also now in cases involving bodily injury.¹⁸⁶ This provision, now section 61 of the Family Law Act of 1986,¹⁸⁷ has prompted a substantial increase in collateral claims in personal injury and fatal accident litigation. In effect, the legislation permits pain and suffering recoveries by persons other than the immediate victim of the accident. Whether the judicial trilogy applies so as to impose ceilings on such claims is not clear. Reform proposals perhaps would narrow the range of claimants and also would require proof of a serious or permanent loss of guidance, care or companionship.¹⁸⁸ Again, the familiar dilemma is posed by these proposals between optimal insurance and optimal deterrence.

The second development that has occurred since the judicial trilogy relates to the "grossing-up" of personal injury awards to ensure that after the stream of income generated by investment of a lump-sum award is subjected to income tax, the remaining income will be sufficient to provide the plaintiff with full compensation for his or her injuries. The judicial trilogy, following earlier authority, appeared to assume that tax factors should not be considered in damage assessments.¹⁸⁹ Thus, foregone income would be estimated in gross (pre-tax) income terms, while the costs of care would be estimated directly, ignoring the fact that the income from a lump-sum award would be subject to tax and would be less than that required to meet these costs of care. Subsequent to the judicial trilogy, Ontario courts began allowing plaintiffs to gross-up damage estimates for costs of care to ensure that awards, net of taxes on income therefrom, would be sufficient to meet these costs. As the Rea calculations noted earlier in this Article¹⁹⁰ reveal, increases in compensation for costs of care seem largely to explain large increases in total awards in permanent disability cases.

From both insurance and deterrence perspectives the position taken by Ontario courts seems correct. With respect to foregone income, a plaintiff is not liable to tax on the pecuniary loss component of an award but instead will be required to pay tax on the future income from the invested award.¹⁹¹ The defendant should be required to meet the plaintiff's net pecuniary losses in full. Similar arguments apply to costs of care, with perhaps two reservations. First,

186. ONT. REV. STAT. ch. 2 § 60 (1978).

187. ONT. REV. STAT. ch. 4 § 61 (1986).

188. See, e.g., Briefs by the Ins. Bureau of Canada and the Canadian Bar Association (Ontario Branch) to the Ontario Task Force on Insurance (1986) (on file with author).

189. *Andrews*, 2 S.C.R. at 232, 83 D.L.R.3d at 454; *Thornton*, 2 S.C.R. at 284-85, 83 D.L.R.3d at 491; *Arnold*, 2 S.C.R. at 325, 83 D.L.R.3d at 633.

190. See *supra* note 47 and accompanying text.

191. See *Arnold*, 2 S.C.R. at 324, 83 D.L.R. 3d at 633 (award invested "will generate income and that income will be subject to tax.").

it is not clear whether the large awards now being made for costs of care implicitly include a significant component of what would previously have been regarded as pain and suffering damages, but which now has been subsumed into the scale of care that will be underwritten. Second, compensation for costs of care is not compensation for loss of what otherwise would have been a taxable income stream (as in the case of foregone earnings), so that in revenue terms, the case for taxing income from an invested award does not seem nearly as strong as taxing income from the pecuniary loss component of the award. Unfortunately, proposals for the adoption of nontaxable structured settlement schemes would treat both components of awards similarly, in effect producing overcompensation of victims in respect of their pecuniary losses, while appropriately compensating them for costs of care. Amendments to the federal Income Tax Act¹⁹² may be another reform option, although it would be difficult to operationalize a distinction between the treatment of income from awards that relate to foregone earnings and income from awards that relate to costs of care in assessing a plaintiff's liability to tax on a year-to-year basis in the future. In this event, perhaps some kind of structured settlement scheme may represent the least imperfect of a set of second-best solutions.

Another area of contention relates to pre-judgment interest. The Judicature Amendment Act of 1977 provided for the awarding of pre-judgment interest in civil litigation at relatively high rates of interest (in effect, prime rate plus one percent, running from notice of claim until judgment).¹⁹³ Prejudgment interest now often forms a significant component of larger awards. The apparent rationale for this legislation (now sections 137-139 of the Courts of Justice Act 1984)¹⁹⁴ was to encourage settlements by reducing incentives for defendants and their insurers to protract negotiations or proceedings with a view to appropriating income from prospective payouts for as long as possible.¹⁹⁵ This seems a well-taken concern. Obviously, a regime that provides for no or below-market interest prior to judgment creates incentives to procrastinate while increasing incentives for plaintiffs to settle. Excessively high prejudgment interest rates have the opposite effect: defendants will face strong incentives to settle while plaintiffs will have incentives to procrastinate. The appro-

192. CAN. REV. STAT. ch. 148 (1952) (amended by ch. 63, 1970-71-72 Can. Stat.).

193. ONT. REV. STAT. ch. 51 (1977).

194. ONT. REV. STAT. ch. 11 (1984).

195. C. BRUCE, ASSESSMENT OF PERSONAL INJURY DAMAGES 211 (1984).

priate regime would seem to be one that is neutral in its impact on the incentives of both parties to settle, that is, a regime that adopts market interest rates, which approximately seems to be what the current legal regime does. Thus, there seems to be no case for substantially reducing the current rate of interest. On the other hand, proposals that prejudgment interest should not begin to run until the plaintiff has not only given the defendant (or his insurers) notice of claim, but also sufficient medical information to enable an initial assessment of the merits of the claim may have more merit. However, defining with precision the evidentiary requirements that must be met in this respect may be difficult, perhaps making the rule less certain and more unpredictable in its operation than the current rule.

A further quantification issue worth brief mention relates to the discount rate applied to foregone future income streams in reducing them to present value terms to determine the amount of a lump-sum award. Several years ago a rule of court was adopted in Ontario fixing a discount rate of two and one half percent in all personal injury cases,¹⁹⁶ reflecting historical evidence as to levels of real interest rates over time. There would seem to be substantial advantages in a system-wide rule of this kind in terms of reducing uncertainty and rates of variance in awards. However, the insurance industry argues that this discount rate is too low, and that even modestly higher discount rates would reduce significantly the size of larger awards. This is, of course, true, but reducing the size of awards is not the end in itself, one would hope, of the reform process. However, there is some evidence of an upward shift in real interest rates in recent years, and perhaps consideration should be given to reviewing the currently prescribed discount rate to reflect current best estimates of real rates of interest.

The issues reviewed in this section indicate an increasing congruence between the Canadian and United States tort systems, especially with respect to determinations of liability, but also in some respects to quantification of damages. Further, the substantial trade flows between the two countries mean that in some areas, Canadian firms or their United States subsidiaries trading in United States markets are directly subject to the impact of the United States tort system. Similar considerations apply to national suppliers trading in Canadian provincial jurisdictions that have adopted strict liability regimes. These considerations are particularly relevant in the products liability context, but may also be relevant, albeit to a lesser extent, in other areas, such as professional services and construction and transportation activities. With prospects of further bilateral

196. *Id.* at 208.

trade liberalization, further integration in the impact of the two tort systems on economic activities in the two countries can be anticipated. In short, somewhat similar reactions of insurance and reinsurance markets to the tort systems in Canada and the United States, as they currently present themselves, as they have recently evolved, and in particular as they seem likely to evolve in the future, seem largely justified. Insurance, by definition, entails pricing future risks, and in this respect future socio-legal risk of changing currents in the Canadian tort system that seem likely to parallel those already more overtly influential in the United States tort system will manifest themselves immediately in decisions on pricing and coverage.

Somewhat fragmentary evidence of more subdued symptoms of the liability crisis in Canada may well accurately reflect the residual differences between the two legal regimes.¹⁹⁷ If general patterns remotely resembling these orders of magnitude can be corroborated more systematically and continue to obtain, this decisively would refute contentions that insurance and reinsurance markets perversely fail to distinguish Canadian and American tort systems. Such data also suggest that it is the distinctive features of the two tort systems as they presently exist and as they may evolve in the future that primarily explain the particular complexion of the current liability insurance crisis.

197. For example, Sean Mooney of the New York-based Insurance Information Institute recently claimed that "commercial liability insurance premiums in Canada were expected to experience increases in 1985 of 15% contrasted with 72% in the U.S. On a per capita basis, commercial liability premiums are much lower in Canada than in the U.S. In 1985, liability premiums (excluding auto) averaged \$18 per capita in Canada compared with \$60 per capita in the U.S. The different legal system in Canada is the most likely factor explaining this wide divergence in the cost of insurance." S. MOONEY, *THE EXECUTIVE LETTER* 40 (1986). Time Magazine, in a recent cover story on the liability insurance crisis, claimed that a typical annual premium for an obstetrician in Los Angeles is about \$45,000 and for a neurosurgeon in Long Island, New York, about \$83,000. Church, *Sorry, Your Policy Has Been Cancelled*, *TIME*, Mar. 24, 1986, at 18. These numbers should be compared with Appendix C to this paper on trends in medical malpractice insurance premiums in Canada which, while showing rapid recent increases, also reveal that no member of any medical specialty in Canada pays more than \$5,000 per annum in premiums (and many medical practitioners pay much less). Sellers claims in his recent study of Canadian medical malpractice insurance experience that the average malpractice award in Canada in 1984 was \$90,000 compared to \$338,463 in the United States and that in 1984 one doctor in 30 in Canada was involved in liability litigation compared to one in 12 in the United States. Sellers, *supra* note 51, at 2-3. Time Magazine claims, astonishingly, that 73% of obstetricians and gynecologists in the United States have been sued at least once. Church, *supra* note 197, at 20.

CONCLUSION

With the adoption of strict liability in the United States in the early 1960s, initially in the products area and subsequently in other areas such as toxic waste discharges, and with the broadening scope of the domain of negligence, all principally premised on risk-spreading rationales, the United States tort system has become increasingly incoherent and unpredictable, generating correlative uncertainties in associated third-party insurance markets. Parallel, although less extensive trends towards the adoption of strict liability in product and toxic waste contexts, and similar tendencies to relax the elements of proof in negligence cases, have produced similar, although less severe, instabilities in Canadian insurance markets.

The social insurance rationale for civil liability is indefensible for a variety of reasons. Most of the difficulties flow out of the impossibility of reconciling the social insurance and deterrence objectives of the tort systems in any principled way. As courts oscillate in increasingly unpredictable ways between the relative weights attached to these two objectives, uncertainty (socio-legal risk) afflicting associated private third-party insurance markets increasingly destabilizes these markets. Insurance objectives would dictate substantially smaller awards than at present, but deterrence objectives would dictate that tortfeasors be faced with the full social costs of their wrongdoing. Insurance objectives also would make the quality of defendant's conduct irrelevant and would focus instead on his relative risk-bearing or risk-spreading capacity. Deterrence objectives would focus on the former consideration and ignore the latter. Strict liability, based on social insurance rationales, cannot be kept conceptually distinct from absolute liability. But once this is acknowledged the choice of insurer becomes arbitrary and unprincipled — any "deep pocket" will do. Moreover, compensation or social insurance administered through the tort system — in large part because of the uncertainties involved — is appallingly inefficient and incomplete. Victims receive only forty percent of monies entering the system, compared to eighty or ninety percent under most forms of first-party or social insurance. The costs of access to the system deter many meritorious smaller claims while creating incentives to inflate other claims and awards to overcome these costs.

Moreover, highly protracted delays often are entailed in receipt of compensation — a recent sampling of personal injury claims files concerning claims in excess of \$50,000 undertaken for the author by three major Ontario auto insurers disclosed an average period of three years between notice of claim and settlement.¹⁹⁸ In addition, in

198. Data on file with the author.

many contexts, such as strict products liability, the system is regressive in that low-income consumers pay the same implicit insurance premiums as high-income consumers despite the fact that pecuniary losses so insured differ enormously.¹⁹⁹ Finally, empirical studies suggest that a substantial percentage of accident victims receive no compensation at all through the tort system. In a recent British study, nearly ninety percent of accident victims surveyed (all with relatively serious injuries) failed to benefit in any way from the tort system.²⁰⁰ In Ontario, it has been estimated that only forty-five percent of those seriously injured on Ontario highways recover anything through the tort system.²⁰¹ As a system of social insurance or compensation, the current tort system is, on most criteria, an abject failure.

A justification for the tort system as a system of compensation that is different from the social insurance rationale often offered for strict liability is grounded in Aristotelian and Kantian notions of corrective justice. Drawing on this body of moral philosophy, Ernest Weinrib, for example, has argued that the internal structure of tort law reflects a noninstrumental concept of corrective justice whereby if one person injures another through morally culpable conduct (intentional harm or negligence), he has a moral and legal duty to reinstate the injured party to his pre-interaction state. Weinrib argues that this theory justifies liability for intentional torts and negligence but not strict liability, which would seek to impose liabilities on morally nonculpable individuals in the service of some broader social insurance objective.²⁰² Even if this view of the tort system is persuasive, it leaves unaddressed the insurance needs of many injured individuals who would not be compensated. As Weinrib acknowledges, these needs properly would require resolution by policy responses outside the tort system. In his view, these needs might indeed justify (on instrumental grounds?) the replacement of tort law

199. See Priest, *supra* note 13, at 1585-86.

200. D. HARRIS, COMPENSATION AND SUPPORT FOR ILLNESS AND INJURY 46 (1984).

201. ONTARIO LAW REFORM COMM'N, REPORT ON MOTOR VEHICLE ACCIDENT COMPENSATION ch. 5 (1973).

202. See Weinrib, *Toward a Moral Theory of Negligence Law*, 2 LAW & PHIL. 37 (1983); Weinrib, *The Insurance Justification and Private Law*, 14 J. LEGAL STUD. 681 (1985). Other tort theorists apparently regard strict liability as consistent with a corrective justice framework: see, e.g., Epstein, *A Theory of Strict Liability*, 2 J. LEGAL STUD. 151 (1973); Fletcher, *The Search for Synthesis in Tort Theory*, in JUSTICE, RIGHTS AND TORT LAW (M. Bayles & B. Chapman eds. 1983); C. FRIED, AN ANATOMY OF VALUES (1971).

by a comprehensive accident compensation scheme based on the New Zealand model.²⁰³

With respect to the deterrence objective of the tort system, the judgment must be more qualified. In order to achieve an optimal deterrence regime, damage awards must reflect the full social costs engendered by defendant's wrongdoing. For the victim, the object of the exercise ceases to be that of finding a "deep pocket" but rather identifying specific behavior which is deferrable, meaning behavior which can be avoided or modified by defendants at lower cost than the cost to victims injured by it.

While much law and economics writing and other theorizing in recent decades has argued that strict liability may have more efficient deterrence properties than negligence,²⁰⁴ this view is now under increasing attack. Two major lines of argument have buttressed this view. The first is that the courts often will be unable to determine with accuracy whether a given defendant could have avoided an accident through precautions at a lower cost than expected accident costs (the Learned Hand negligence test) and therefore by imposing strict liability on the manufacturer of the product, the burden of weighing accident costs against avoidance costs will be imposed on the best-placed decider — the party with superior information on avoidance and accident costs relative both to the plaintiff and the court.²⁰⁵ The defendant will then decide whether it is more efficient to modify or withdraw the product or pay the damage awards.

While this argument, which revolves around relative decision and error costs, has some force to it, it suffers from substantial indeterminacy. In replacing the least-cost avoider rule (the negligence rule) with the best-placed decider rule (strict liability), it is not clear where the line might be drawn in any principled way. For example, why not make all physicians strictly liable for medical procedures that turn out negatively, on the grounds that a court is not as well-placed as the physician to determine whether the procedure should have been handled differently or an alternative procedure, in retrospect, would have been more appropriate. Thus, a surgeon undertaking high-risk brain surgery that does not turn out as hoped would be strictly liable. The same reasoning could be extended to lawyers, engineers, architects, accountants, truck, bus or taxi operators or indeed almost any kind of professional or business defendant with any claim to specialized expertise.

The second major argument that is commonly made to support

203. Weinrib, *The Insurance Justification and Private Law*, *supra* note 202, at 687.

204. See generally Calabresi & Hirschoff, *Towards a Test for Strict Liability in Torts*, 81 *YALE L.J.* 1055 (1972).

205. See *id.*; Calabresi & Klevorick, *supra* note 67.

strict liability on deterrence grounds is that safety in many contexts is a function of two factors — the level of care and the level of output.²⁰⁶ Care in designing, manufacturing, and marketing a product will affect the incidence of accidents. Both negligence and strict liability regimes in theory equally well address the need for creating incentives to take appropriate care. However, even if all cost-justified care is taken, products will still, in a residual range of cases, cause accidents. If these potential accident costs are unperceived by consumers, they will treat the nominal price of the product as the full price, ignoring potential accident costs which should be viewed as an additional implicit cost associated with purchasing and using the product. Hence, to the extent that consumers underestimate the real price of the product, they will demand inefficiently large quantities of it and to the extent that accidents are correlated with the number of units of a product sold, they will be subjected to an inefficiently large number of accidents. Strict liability, by impounding these accident costs in the price of a product, will lead to an optimal level of demand and hence output. A negligence regime will impose no liability for residual accidents once due care is demonstrated, and hence will induce inefficiently high levels of output.

This argument is subject to two objections. The first objection is empirical and challenges the proposition that consumers are systematically optimistic, and that they systematically underestimate the probabilities or consequences of product failure. Various strands of psychological and marketing data have been adduced to support this objection.²⁰⁷ The second objection is more theoretical and general. It argues an inherent indeterminacy in the case for internalizing accident costs through strict liability in order to influence levels of output, because it is not clear whose level of activities should be influenced.²⁰⁸ Even in a simple two-party accident case, for example, the

206. Shavell, *Strict Liability Versus Negligence*, 9 J. LEGAL STUD. 1 (1980).

207. See Schwartz & Wilde, *Imperfect Information in Markets for Contract Terms: The Examples of Warranties and Security Interests*, 69 VA L. REV. 1387 (1983); A. Schwartz, *Products Liability Law* (Law and Economics Workshop Paper, Univ. of Toronto Law School, Dec. 10, 1986).

208. This issue has been the subject of long-standing debate. See G. CALABRESI, *THE COSTS OF ACCIDENTS* ch. 7 (1970); Blum & Kalven, *Public Law Perspectives on a Private Law Problem — Auto Compensation Plans*, 31 U. CHI. L. REV. 641 (1961); Calabresi, *Fault, Accident, and the Wonderful World of Blum and Kalven*, 75 YALE L.J. 216 (1965); Blum & Kalven, *The Empty Cabinet of Dr. Calabresi - Auto Accidents and General Deterrence* 34 U. CHI. L. REV. 239 (1966); G. Priest, *Internalizing Costs to Affect Activity Levels* (unpublished manuscript on file with author, Jan. 10, 1986); Henderson, *The Boundary Problems of Enterprise Liability*, 41 MD. L. REV. 659 (1982).

case of a consumer injured by a rotary lawnmower without negligence of either the consumer or lawnmower manufacturer, should we internalize these residual accident costs to the manufacturer under strict liability so as to reduce the number of lawnmower sales, or internalize these costs to the consumer under a negligence regime so as to induce him to use the lawnmower less frequently? Or to take a United States case, *Moran v. Faberge Incorporated*,²⁰⁹ where teenagers poured a bottle of flammable cologne over a lighted candle and recovered against the cologne manufacturer under strict liability for injuries sustained as a result, should we internalize the costs to the cologne manufacturer, the candle manufacturer, or the teenagers, given that the reduction of any one of the three inputs into the accident (or activities) would have reduced the likelihood of the accident? The *Moran* court, while acknowledging consumer misuse, pointed out that the product equally may have presented hazards in a normal use setting, such as a woman smoking a cigarette while applying cosmetics.²¹⁰ However, in this case one might equally plausibly argue for internalizing the accident costs to the cosmetics manufacturer, the cigarette manufacturer, or the consumer. In each case, incentives would be created to reduce one of the inputs into the accident. To take a slightly more complex case, suppose *A*, a drunken driver, swerves into and collides with a car, causing *B*, the other driver, in turn to careen into a lamppost. Assuming for the sake of argument that *A* cannot be reached effectively in a tort cause of action (for example, he is dead or judgment-proof), should the accident costs be internalized to the manufacturer or seller of *A*'s car, the manufacturer or seller of the alcohol, the manufacturer or seller of *B*'s car, or the manufacturer or seller or owner of the lamppost, or *B*? Given that it is impossible simultaneously to internalize accident costs to all activities contributing to an accident, Polinsky suggests that the courts must decide whose activity it is "more important" to control.²¹¹ This might be taken to mean, in economic terms, that in cases like the above, accident costs should be internalized to the activity whose level or supply is likely to be most responsive to cost increases (price elastic). While perhaps correct in theory, this criterion seems hopelessly non-operational in all but the most extreme examples. In the car accident example above, which activities are the most price elastic? How would courts in particular cases go about determining relative price elasticities of demand and supply for all the activities that were necessary conditions for the occurrence of an

209. 332 A.2d 11 (Md. 1975).

210. *Id.* at 20.

211. A. POLINSKY, AN INTRODUCTION TO LAW AND ECONOMICS 48 (1983). See also Shavell, *supra* note 206.

accident?²¹²

Both of the major arguments for strict liability on deterrence grounds, like the argument for strict liability on social insurance grounds, are afflicted with massive uncertainties. While Calabresi has argued that these uncertainties could be reduced by developing a detailed taxonomy of injury-causing situations, where judgments could be made as to the appropriate liability rule by reference to particular features of each category of situation,²¹³ this seems a dauntingly ambitious task and inevitably would seem to entail major new sources of uncertainty in boundary demarcation and application determinations, that is, the switch-points that trigger different liability rules.²¹⁴

The argument for classical negligence liability on deterrence grounds is somewhat more robust, although the predictability of the negligence system should not be overstated. In many contexts, such as products liability and professional malpractice, it is far from clear that all-purpose courts possess a comparative advantage over other, more specialized institutions in engaging in what is, in effect, public standard setting.²¹⁵ Indeed, we observe specialized agencies in both the contexts cited charged squarely with this task. Apart from the advantages of specialization, such agencies also are able to set *pro-spective* safety or performance standards in light of what now is known about a product's safety characteristics or the health effects of a medical procedure without at the same time assigning liability for past actions which may not have been negligent. The tort system necessarily operates both prospectively and retrospectively, but retrospective assignments of liability, if predicated on proof of negligence, may not yield optimal prospective safety standards. Conversely, optimal prospective safety standards, if also applied retrospectively, may generate severe problems of insurability with respect to what in the past may have been unknowable risks. Again, a single legal instrument seems unlikely to perform simultaneously prospective standard-setting functions and retrospective assignments of liability in an opti-

212. See G. Priest, *Internalizing Costs to Affect Activity Levels*, *supra* note 208.

213. See Calabresi & Hirschhoff, *supra* note 204; Calabresi & Klevorick, *supra* note 67.

214. See Brown, *supra* note 71.

215. See Sugarman, *Doing Away With Tort Law*, 73 CALIF. L. REV. 558, 559-91 (1985); Latin, *Problem-Solving Behavior and Theories of Tort Liability, Can Lawyers Solve the Problems of the Tort System?*, 73 CALIF. L. REV. 877 (1985). Cf. comments on Latin by Posner, 73 CALIF. L. REV. 747 (1985); Owen, *Deterrence and Descent in Tort*, 73 CALIF. L. REV. 665 (1985); E. BELOBABA, *PRODUCTS LIABILITY AND PERSONAL INJURY COMPENSATION IN CANADA* ch. VI (1983).

mal way.

Similar tensions afflict current proposals to supplant or constrain the tort system in particular contexts, such as medical malpractice, with specialized arbitration systems or screening panels. If these systems are intended to declare appropriate standards of medical procedures for the future, then determination of these standards should be independent of what might or might not have been regarded as negligent behavior in the past (with less advanced medical knowledge). But if such determinations also are intended (as they are) to assign liability for past events, then under a negligence regime what were in the past reasonably attainable levels of competence should govern (only deviations from these standards are likely to have been defensible by the tort system). This is the basis of the argument for a "state of the art" defense and a defense of compliance with prevailing regulatory standards. In any event, either prospective performance standards are likely to be set too low or retrospective determinations of liability are likely to entail standards that were previously unattainable. Uncertainty as to what the courts see as their primary function obviously will translate into uncertainty in the pricing and availability of insurance.

More generally, whether efficient enforcement of public standards is achieved through multiple, individual, private lawsuits, with their attendant costs, is far from clear. There often may be returns to scale and specialization in public enforcement. In addition, unlike the tort system, regulation often can be preemptive and does not depend on the occurrence of injuries and the attendant human waste and suffering to trigger enforcement action. Thus, *a priori* it is unclear whether either in the formulation or enforcement of public safety standards a strong case can be made for the negligence regime. However, it is acknowledged that this is an empirical question that requires a comparative, empirical evaluation of the efficacy of alternative regulatory strategies.²¹⁶ The demonstrable weakness of commitment in many self-governing professions to monitoring post-entry competence with any rigor,²¹⁷ and public regulatory failures, arguably, in some of the toxic tort contexts,²¹⁸ make generalizations difficult. However, just as under-regulation is not socially optimal, so too is excessively stringent regulation. A number of recent studies have yielded disturbing findings on the consumer welfare losses from

216. Cf. Shavell, *Liability for Harm versus Regulation of Safety*, 13 J. LEGAL STUD. 357 (1984).

217. See M. TREBILCOCK, C. TUOHY & A. WOLFSON, PROFESSIONAL REGULATION ch. 11 (1979); REPORT OF THE PROFESSIONAL ORGANIZATIONS COMMITTEE ch. 9 (1980).

218. See, e.g., P. BRODEUR, OUTRAGEOUS MISCONDUCT: THE ASBESTOS INDUSTRY ON TRIAL (1985).

overly restrictive safety regulations.²¹⁹

One might argue sensibly that category-by-category judgments of the relative strengths and weaknesses of tort law and public regulation as deterrents are required. For example, at one end of the spectrum may be situations in which the tort system may play a useful deterrence role such as the case of transient ride operators at seasonal amusement parks who are subject to relatively superficial municipal inspections. This is what Mr. Justice Allan Linden has referred to as the role of tort law as ombudsman.²²⁰ At the other end of the spectrum may be public regulation of highway safety; some would argue that criminal sanctions for careless driving and other public countermeasures are much more likely to influence traffic safety than the tort system, so that adoption of a no-fault system of compensation for auto accidents may sacrifice little in the way of deterrence. However, even here it is important to point out that there is substantial empirical debate about the efficacy of many public countermeasures²²¹ and about the deterrent effects of the tort system. A recent detailed study by Gaudry estimates that an additional one hundred persons have been killed per year on Quebec roads as a result of Quebec's adoption of no-fault auto insurance in 1978.²²² Gaudry attributes most of this effect to the fact that the Quebec scheme (a publicly administered fund) charges all drivers a flat premium, irrespective of age, driving record, *et cetera*. Thus, young drivers or drivers with bad driving records are able to buy insurance and drive whereas under compulsory, private, third-party insurance they may not be able to afford to buy the insurance that is a condi-

219. See, e.g., Peltzman, *An Evaluation of Consumer Protection Legislation: The 1962 Drug Amendments*, 81 J. POL. ECON. 1049 (1973); Peltzman, *The Effects of Automobile Safety Regulation*, 83 J. POL. ECON. 677 (1975); K. VIXCUSI, *REGULATORY CONSUMER PRODUCT SAFETY* (1984). For more favorable assessments of particular product safety regulatory regimes, see Ronald Hirschorn, *The Administration of the Hazardous Products Act*, in *THE REGULATION OF QUALITY* (D. Dewees ed. 1983); R. CRANDALL, H. GRUENSPECHT, T. KEELER, & L. LAVE, *REGULATING THE AUTOMOBILE* ch. 4 (1986).

220. Linden, *Tort Law as Ombudsman*, 51 CAN. B. REV. 155 (1973).

221. See, e.g., J. ADAMS, *RISK AND FREEDOM: THE RECORD OF ROAD SAFETY REGULATION* (1985).

222. M. GAUDRY, *DRAG, UN MODELE DE LA DEMANDE ROUTIERE DES ACCIDENTS ET DE LEUR GRAVITE, APPLIQUE AU QUEBEC DE 1956 A 1982* (1985). For contrasting findings on the safety consequences of United States no-fault systems, see Kochoonowski & Young, *Deterrent Aspects of No-Fault Automobile Insurance: Some Empirical Findings*, 52 J. RISK & INS. 269 (1985) (finding no safety effects at all and contradicting the findings of Landes, *Insurance, Liability and Accidents: A Theoretical and Empirical Investigation of the Effect of No-Fault Accidents* 25 J. L. & ECON. 49 (1982), and Grayston, *Deterrence in Automobile Liability Insurance — the Empirical Evidence*, 40 INS. COUNS. J. 117 (1973)).

tion of the right to drive. While this feature of the scheme could be changed, for example, by the adoption of a bonus-malus scale for determining premiums by reference to traffic violations, as recommended by the Slater Task Force²²³ and as supported by Gaudry,²²⁴ this simply would substitute the criminal courts for the civil courts in making determinations of fault for insurance purposes. Fault would, in effect, be reintroduced in another guise, and criminal courts may become increasingly congested, as incentives to contest traffic offense charges are greatly increased.

Between these two examples, there are situations, such as professional malpractice, where professional self-regulation may provide partial or incomplete assurances of competence. Danzon reports that a group of medical and legal experts found in a survey of hospital cases in California that only a small fraction of cases of *prima facie* medical negligence led to malpractice claims and that a vastly smaller fraction (indeed a trivial fraction) attracted the attention of the disciplinary mechanisms of the self-governing bodies of the profession.²²⁵ For example, in California in 1976, there were 1500 *paid* malpractice claims, but only six disciplinary actions for incompetence or gross negligence.²²⁶ If self-governing professions are not willing or able to regulate effectively the post-entry competence of their members, then the tort system may have a role to play as ombudsman in monitoring the monitors. That is to say, we should not simply assume that all expansions of liability are bad by reference to some more austere, assumed "golden age."²²⁷ Why medical practitioners and hospitals are sued more frequently today than previously is a complex puzzle. Is it because they are more negligent than their predecessors? This seems highly implausible. Is it because patients in a more impersonal age are now more willing to sue negligent health care providers? Danzon finds that urbanization is an important variable in explaining variations in the incidence of malpractice claims.²²⁸ Is it because the tort system now increasingly predicates liability not on fault but on capacity to insure or bear risks? The burden of this paper has been to emphasize the third kind of explanation for recent trends in the United States tort system, but the second type of explanation also cannot be dismissed as a factor.

In reviewing proposals that currently seem to command wide support for reforming the tort system, I believe that the fundamental

223. SLATER TASK FORCE REPORT, *supra* note 8, at 145-46.

224. M. GAUDRY, *supra* note 222.

225. P. DANZON, MEDICAL MALPRACTICE, *supra* note 57, at 19-24.

226. P. Danzon, Paper Presented to the American Bar Ass'n Conference Fall 1986, at 13 (copy on file with the author).

227. Cf. Epstein, *Products Liability as an Insurance Market*, 14 J. LEGAL STUD. 645 (1985).

228. P. DANZON, MEDICAL MALPRACTICE, *supra* note 57, at 74-75.

contradiction between social insurance and deterrence objectives continues to be seriously obscured. For example, the U.S. Department of Justice Tort Policy Working Group has advanced a series of proposals, many of which are designed to reduce the size of awards by, for example, limiting pain and suffering damages, limiting punitive damages, and subtracting collateral benefits.²²⁹ *At the same time*, the Group has proposed that fault be restored as the general basis of tort liability.²³⁰ The proposals to reduce awards can be justified from an insurance perspective — they represent overinsurance that would not be observed in private first-party insurance markets — but the return to negligence principles can only be predicated on the primacy of the deterrence objective (although it is to be noted that the Group's proposals make no effort to render negligence principles more determinate than they have become). For this objective to be optimally realized, tortfeasors must be confronted with the full social costs of their negligent actions. This position also probably would be supported by the corrective justice theory of tort law. If, on the other hand, efficient insurance is the dominant objective of tort law, it is not clear why fault is relevant. The proposals appear to overlook the fact that the only general example of this kind of legislative curtailment of awards is workers' compensation legislation where, in return for limited schedules of damages, workers have been relieved of the necessity of proving fault. This kind of social contract may well make sense on insurance grounds, but the Tort Policy Working Group's proposals reflect no similar social contract. Efficient social insurance cannot be delivered by the tort system because the system yields no coherent theory of how to identify the most efficient insurer. Given this incoherence, and the uncertainties that are attendant on it, it is futile to attempt to reform the system with social insurance objectives as the operative criteria.²³¹ The closer we come to realizing these objectives through the tort system (however imperfectly), the further we will have moved away from attainment of optimal deterrence objectives, which at least arguably can be advanced coherently through the system. There is a necessary *inverse* relationship between the two sets of objectives.

The same contradiction in thinking but in reverse is evident in another recommendation of the Tort Policy Working Group — to elim-

229. DOJ REPORT, *supra* note 5, at 61-74.

230. *Id.*

231. See Sugarman, *supra* note 215, at 591-603; E. BELOBABA, *supra* note 215, ch.

inate joint and several liability.²³² In this case, the recommendation may be justified on *deterrence* grounds — joint and several liability may expose an individual tortfeasor to more than the social costs of his particular actions, and in this sense over-deter him. But on *insurance* grounds, the effect of proportioning liability among many joint tortfeasors may well, in many contexts, for example, toxic waste sites, leave plaintiffs inadequately compensated (that is, underinsured).

Similar confusion about the fundamental presuppositions of the tort system is evident in the otherwise impressive work of Patricia Danzon. She argues that the tort system cannot be justified plausibly as a system of compensation or insurance (it is hopelessly inefficient), but can be justified only in deterrence terms, which she accepts as often being valid. However, having adopted a deterrence predicate for the system, she then proposes that tort awards be drastically reduced (similar in substance to the Tort Policy Working Group's proposals) and that statutes of limitation and repose be amended so as to drastically reduce the time within which long-tail risks can support a legal action.²³³ Both sets of proposals are directly antithetical to the deterrence objective she espouses, and can be justified only by with reference to the insurance objective that she rejects.

This Article's premise is that the social insurance objectives sought (mistakenly and at great expense) to be achieved by the current tort system need to be reassigned to the domain of social welfare policy, where gaps in present first-party and social insurance programs can be identified empirically and policy responses devised. Whether these responses might take a form as radical as the New Zealand Accident Compensation scheme²³⁴ cannot be determined unless tort insurance issues are transmuted into social welfare policy issues and investigated thoroughly in that framework. But this kind of option cannot sensibly be foreclosed. In evaluating a New Zealand-style universal accident compensation option, two crucial design issues stand out: first, from a social insurance perspective, can one ethically defend a system that creates a "privileged" class of victims of one source of misfortune (accidents) and treats victims of other sources of misfortune (for example, illness, congenital disabilities, or desertion) that generate similar income deficiencies much less generously? The extent of these inequities is largely a function of whether an accident compensation scheme is conceived of primarily as an in-

232. DOJ REPORT, *supra* note 5, at 64.

233. Danzon, *Tort Reform and the Role of Government in Private Insurance Markets*, 13 J. LEGAL STUD. 517 (1986); see also P. DANZON, *MEDICAL MALPRACTICE*, *supra* note 57, at 151-85.

234. Accident Compensation Act, 1972, no. 43, 1 N.Z. Stat. 521.

come insurance scheme or much more modestly, as a minimum social security safety net. Second, from a deterrence perspective, can one justify a scheme that eschews deterrence considerations altogether by imposing flat levies on motorists and employers, irrespective of accident experience or potential, as the New Zealand scheme (like the Quebec no-fault auto scheme) does?

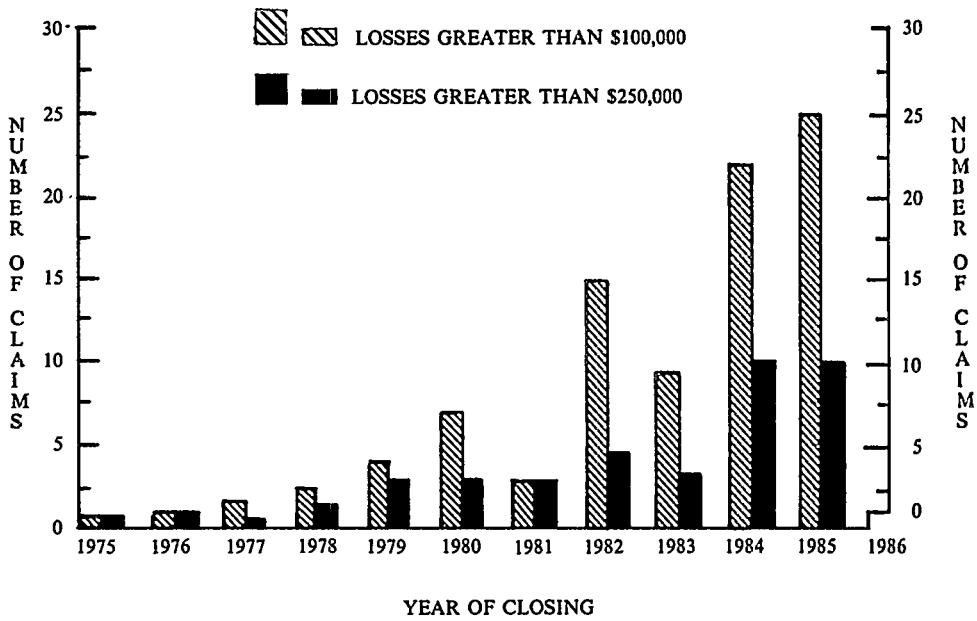
With respect to the deterrence function of tort law, further and more systematic empirical research is urgently required into the incentive effects of the tort system in various accident contexts. Firmer judgments are needed as to what deterrent benefits from tort law would be sacrificed in each of these contexts if tort law were to be displaced by more complete and efficient compensation schemes. In a second-best world, these comparative judgments are rarely likely to be easy. The complementary question of whether regimes of public regulation or criminal liability can be designed or re-designed so as to take up adequately the deterrence slack in currently contentious areas of tort law such as products liability, environmental liability, and professional malpractice liability, without creating or perpetuating the kinds of inefficiencies that afflict many current regulatory efforts, must also constitute a central feature of any reevaluation of the role of tort law.

If neither social insurance rationales generally, nor deterrence rationales (either generally or in particular contexts), are able to sustain the tort regime for personal injuries, then we are left only with theories of corrective justice to sustain the system. Whether such theories are sufficiently robust to justify the enormous costs, delays, and unredressed and undeterred human suffering entailed in either the present or any more traditional tort system is a matter which economics cannot answer.²³⁵ Whether moral theory is impervious to these costs and, if so, why, would be to launch another inquiry.

235. Cf. Sugarman, *supra* note 215, at 603-09.

APPENDIX A

*General Liability Bodily Injury
Large Loss Settlements*



Source: Derived from data made available to the author by one of Canada's major general liability insurers.

APPENDIX B

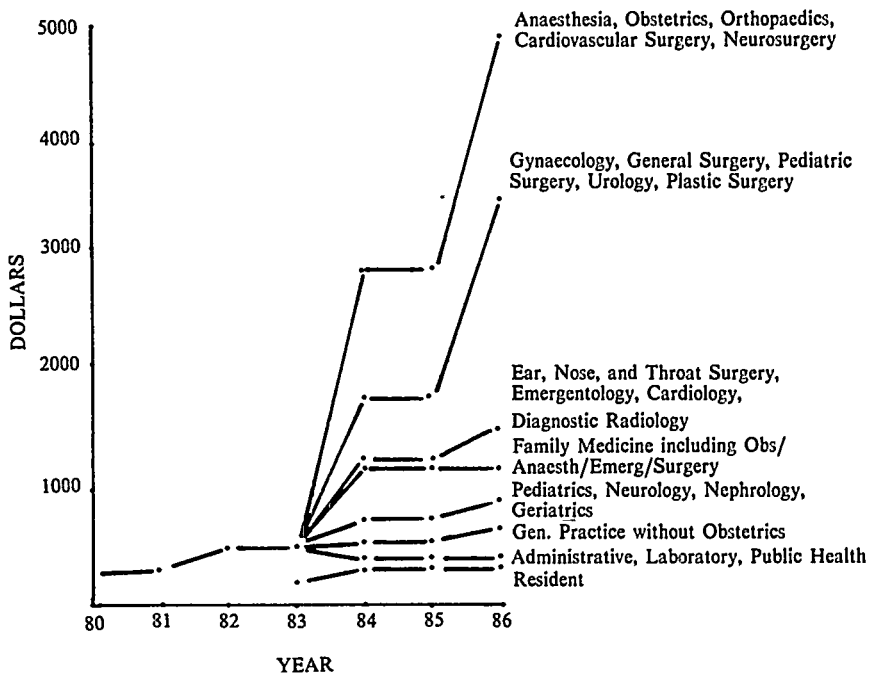
General Liability Bodily Injury
Approximate Age of Claim When Closed

YEAR OF CLOSING	2 YEARS OLD		3 YEARS OLD		4 YEARS OLD		5 YEARS OLD		2-5 YEARS	
	NO.	AVG.	NO.	AVG.	NO.	AVG.	NO.	AVG.	NO.	AVG.
1977	274	3239								
1978	327	3043	145	4398						
1979	294	3795	209	8538	91	7760				
1980	248	3631	224	5350	163	9911	71	17033	706	6974
1981	288	4029	196	7504	135	6719	106	15729	725	7180
1982	334	4937	228	7957	150	9179	80	13443	792	7469
1983	337	6772	194	7721	117	11344	94	11252	742	8309
1984	299	6162	212	11541	123	18269	98	22082	732	11886
1985	343	7321	193	13489	131	34888	64	34766	731	16293
Average Annual Change										
	12.4%		13.5%		25.0%		13.4%		18.2%	
R ²	.915		.707		.716		.346		.840	

Source: Derived from data made available to the author by one of Canada's major general liability insurers.

APPENDIX C

CMPA Fees

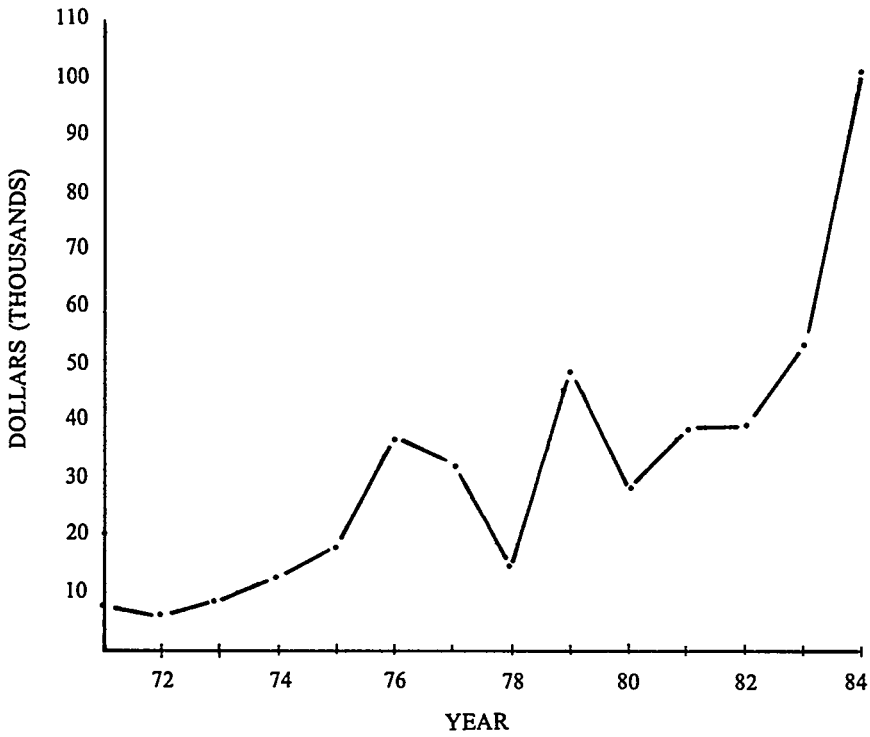


Source: Sellers, *The Potential Effect of Liability Claims on the Canadian Public Health Care System*, in SLATER TASK FORCE REPORT, *supra* note 8, at 363a.

APPENDIX D

Average Awards and Settlements

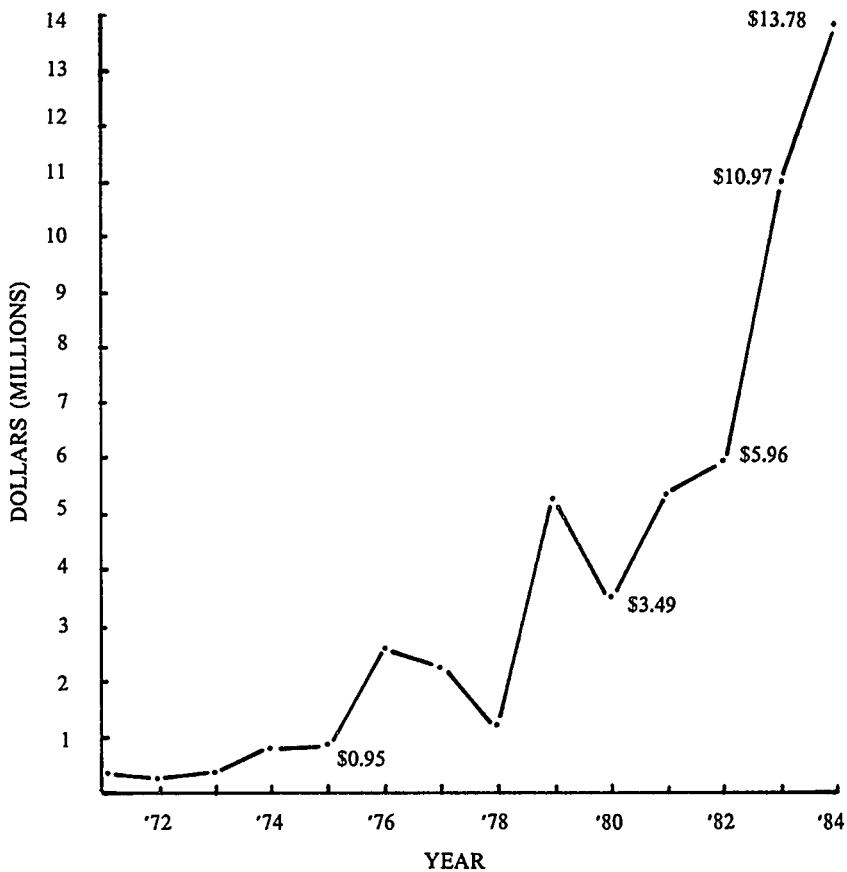
CMPA



Source: Sellers, *The Potential Effect of Liability Claims on the Canadian Public Health Care System*, in SLATER TASK FORCE REPORT, *supra* note 8, at 363b.

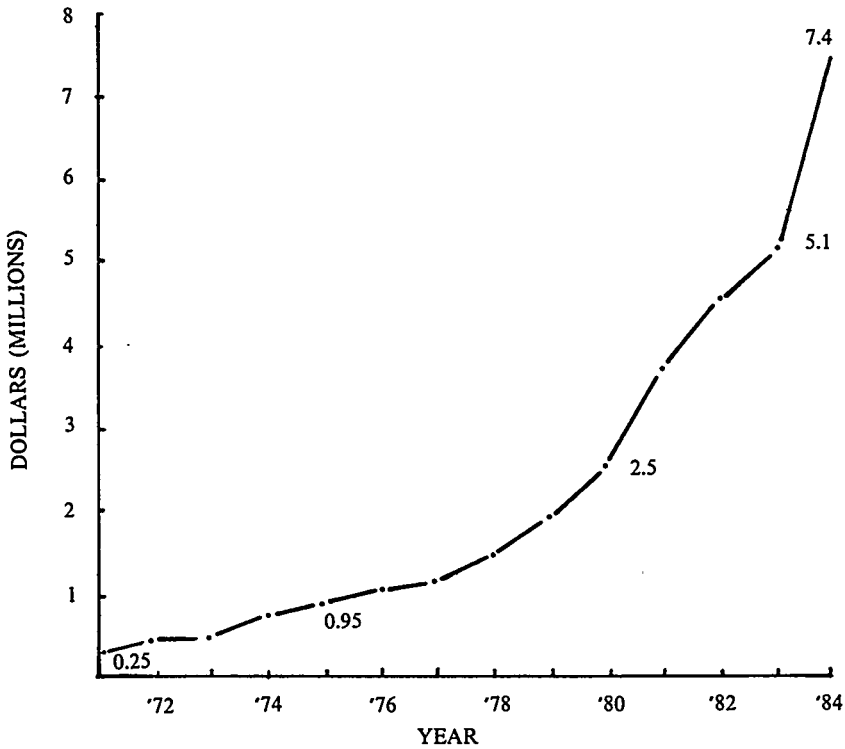
APPENDIX E

Damages Awarded Against Physicians
CMPA



Source: Sellers, *The Potential Effect of Liability Claims on the Canadian Public Health Care System*, in SLATER TASK FORCE REPORT, *supra* note 8, at 363c.

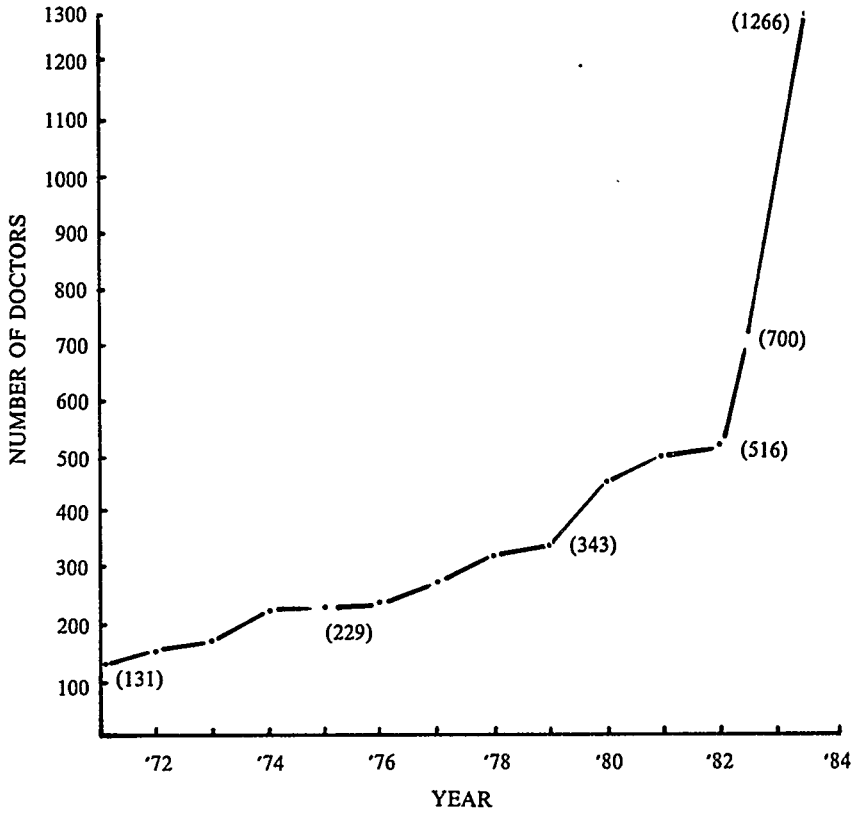
APPENDIX F
Legal Defense Costs
CMPA



Source: Sellers, *The Potential Effect of Liability Claims on the Canadian Public Health Care System*, in SLATER TASK FORCE REPORT, *supra* note 8, at 363d.

APPENDIX G

Writs Served Against Doctors



Source: Sellers, *The Potential Effect of Liability Claims on the Canadian Public Health Care System*, in SLATER TASK FORCE REPORT, *supra* note 8, at 363f.