

# PUBLIC POLICY SOURCES

Number 2

## The Health and Moral Hazards of No-Fault Insurance

*Peter Sheldon*

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## Introduction: The Health and Moral Hazards of No-Fault Insurance

The siren call of "pure" no-fault automobile insurance echoes once more in Canada. This time its seductive strains are heard in British Columbia. The imminent introduction of no-fault insurance raises familiar questions. "Is no-fault automobile insurance better than a tort liability system in containing premium costs, producing fairer awards and reducing injuries?" The quick answer, based on empirical evidence of no-fault insurance and economic theory, is that no-fault does not deliver the benefits promised; it simply redistributes the costs which may actually increase.

This paper provides the somewhat longer answer to that question. The Fraser Institute, through its Law and Markets project, is pleased to publish the work of first time Institute author, Peter Sheldon, one of Vancouver's up and coming practicing economists. This introduction sets the stage for Sheldon's detailed analysis. In turn, his work will set the stage for later Institute investigations into the effect of no-fault insurance should it be introduced in British Columbia. This paper builds on the existing body of work done on automobile insurance in British Columbia, most notably, Herb Grubel's 1985 book for The Fraser Institute, *Focus on the Insurance Corporation of British Columbia: Public Monopolies and the Public Interest*.

First, here are some quick definitions. A tort liability system allows automobile injury victims full access to the courts to sue at-fault drivers and/or their insurance company for losses, economic or personal, beyond what is covered by the insurance of either or both parties. A pure no-fault insurance system does not allow injury victims to pursue compensation in the courts. Rather, all benefits are set by the insurer according to a pre-determined scale. Variations of the no-fault regime include add-on insurance that sets a basic amount which injured parties receive whether or not they were at fault. Most provinces, including

BC, have some form of add-on no-fault insurance. Other mixed no-fault schemes allow victims to sue if they meet either a "verbal threshold," based on the severity of injuries sustained, or a "monetary threshold," based on the cost of care.

### The origin of the debate

The origin of the current no-fault debate in BC lies with the increasing pressure on the finances of ICBC, the public monopoly for automobile insurance. BC is a tough market for any insurer; it has the highest rates in Canada for both automobile accidents and car theft. The average cost of injury claims is estimated to have nearly doubled from \$12,500 in 1985 to \$21,404 in 1995. Stolen vehicle claims have gone from 4,876 in 1986 to 28,000 in 1996. In addition, the provincial government has off-loaded onto ICBC many of the costs of the Motor Vehicle Branch and of road safety initiatives, including the controversial photo radar. Not surprisingly, average ICBC premiums have risen by 155 percent since 1986. Last year, ICBC predicted that the current liability system would force up premiums by another 40 percent by the year 2000 if nothing is changed. On the eve of the 1996 provincial election, Premier Glen Clark promised that, if elected, premiums would not increase.

In December 1996, the recently elected Premier Clark then set up an Automobile Insurance Review Team to provide "options" to reduce ICBC costs while keeping average premiums capped at \$975 through the year 2000. In March of this year, it proposed two possible insurance product changes. The first would modify the current liability system but retain a distinction between at-fault and innocent claimants and allow access to the courts. However, ICBC would get first crack at any pain and suffering awards through a \$35,000

deductible, and it would manage any cost-of-care awards (victims would not control any lump sum award). The second option, recommended by a Canadian Bar Association committee headed by Thomas Allen, Q.C., would create a pure no-fault system in which an alternative dispute resolution process would replace access to the courts. ICBC would guarantee income replacement benefits of 100 percent of net income—rather than gross income as is currently the practice—to a maximum of \$650 per week. However, ICBC would deduct any other CPP or Employment Insurance income, and would provide no compensation for pain and suffering, and only limited amounts for loss of function.

The government is expected to introduce legislation this Spring.

In preparing public opinion for this controversial step, the government has directed ICBC's media campaign. The message is surprisingly stark. Lawyers—and by extension the courts—are portrayed as impeding the efficient, equitable, and affordable resolution of automobile-related personal injuries. The claim is that if the formal legal process could be circumvented, then consumers would pay lower premiums, victims would receive fairer compensation, and ICBC could spend more on safety measures to reduce the number and severity of car accidents. In short, ICBC and the government claim no-fault insurance will bring considerable savings and safer roads.

## The evidence on no-fault insurance

Does the empirical record support ICBC's contentions? This is the central question addressed by Sheldon in his work. New Zealand adopted the first pure no-fault scheme in 1974, followed by Australia's Northern Territory in 1979. In Canada, limited add-on no-fault insurance schemes have been adopted by several Canadian provinces starting with Saskatchewan in 1946. In 1978, Quebec was the first North American jurisdiction to move to a pure no-fault regime. Manitoba followed suit in 1994, and Saskatchewan in 1995. Ontario introduced no-fault insurance under a "verbal threshold" in 1990, graduated to a pure no-fault system in 1994, then returned to "verbal threshold" in 1996. Vancouver economist Peter Sheldon recently completed a survey of the various empirical studies about the effects of no-fault insurance and the results world-wide are consistent.<sup>1</sup>

One of the most controversial issues is the impact of no-fault insurance on the rate of accidents, injuries, and fatalities. Sheldon discusses two major empirical studies of Quebec which point out that since 1978, both fatal accidents and accidents leading to injuries have increased.<sup>2</sup> Professor M. Gaudry found in his 1992 study that an estimated 6.8 percent increase in fatalities, 26.3 percent increase in injuries, and a 11 percent increase in property damage can be associated with Quebec's introduction of no-fault insurance. In a separate analysis, Professor R.A. Devlin found similar

1 Peter Sheldon, "No Fault vs. Tort Insurance Schemes: A Survey of the Empirical Evidence," Associated Economic Consultants Ltd., Vancouver, 1996.

2 Both studies are summarized in Peter Sheldon, "No Fault Insurance and the Debate in British Columbia," The Fraser Institute (Forthcoming, May 1997); M. Gaudry, "Measuring the effects of the No Fault 1978 Quebec Automobile Insurance Act with the DRAG Model," in G. Dionne (ed.) *Contributions to Insurance Economics*, Boston, MA: Kluwer Academic Publishers, 1992, pp. 471-498; and R.A. Devlin, "Liability versus No Fault Automobile Insurance Regimes: An Analysis of the Experience in Quebec," in G. Dionne (ed.), *Ibid.*, pp. 499-520..

order of magnitude increases correlated to Quebec's no-fault scheme: 9.62 percent increase in fatalities, 27.0 percent increase in injuries, and 5.33 percent increase in property damage. Professor I.R. McEwin, in examining automobile injuries in New Zealand and Australia's Northern Territory following their introduction of pure no-fault insurance schemes, found the same effect—more deaths, by up to 16 percent more.<sup>3</sup>

Detailed research has yet to give the full picture on how no-fault insurance affects the costs of premiums across Canada. In any event, conclusions would be hard to draw given the prevalence of public monopoly insurers who often set premium levels by political rather than actuarial calculations. Still, it is worth noting the "coincidence" that the provinces which have had pure no-fault insurance since 1993 have witnessed the highest premium increases: Quebec up 35 percent, Ontario up 29.5 percent, and Manitoba up 12.9 percent.

The major financial effect of no-fault insurance—and hence its attraction—is that it imposes a cap on individual injury awards and on their associated transactional costs, e.g., legal counsel and court fees. Yet, at least in the case of awards, this can be an illusory gain if the government is both the monopoly insurance provider and the monopoly health care provider, as is the case in British Columbia. If ICBC is able to secure a cap on individual awards, that may still leave unpaid bills for long-term care, for instance. The money has to come from somewhere, whether it's from the individual or from the public health care system. If the individual cannot pay (and it's likely he or she cannot because they are not working), then ICBC's "savings" shows up as an added expense in the health care budget. What British Columbians may save in lower insurance premiums they will have to make up in higher health care premiums.

For most economists, the potential problem with no-fault insurance is far greater than the unintended displacement of costs. No-fault insurance may actually encourage anti-social behaviour, despite all the good intentions of its designers. In terms of automobile insurance, the anti-social behaviour is, of course, reckless driving. Economists describe the effect as "moral hazard," and it can be particularly acute under the conditions of a public monopoly insurance provider.

A good way to illustrate "moral hazard" is by using the well-documented fact that restaurants insured against fire burn down more often than restaurants that aren't. The reason is not that insured restaurant owners tend to be immoral arsonists. Rather, it is that the owners, knowing that they have insurance, may not take due care to prevent fires. They may cut costs on sprinkler systems and on grease cleaning schedules.

Proponents of no-fault insurance, however, argue that moral hazard is not a factor in driving behaviour. They point out that driving is such a complex activity, requiring practically hundreds of driver actions per minute. They contend that "honest mistakes" rather than negligence account for most accidents; and, if we are all equally susceptible to accidents, it is unfair to discriminate against those who do get into accidents.

Can "moral hazard" exist in the relationship between driving and automobile insurance? Well, the empirical evidence from Quebec, New Zealand, and Australia does indicate a link.

Economic theory also suggests there should be a connection because price and demand are inversely related. That is, if you raise the cost of reckless driving, you will reduce the demand or the likelihood of bad driving. A driver will curtail

3 I.R. McEwin, "No Fault and Road Accidents: Some Australasian Evidence," *International Review of Law and Economics*, vol. 9, 1989, pp. 13-24.

the thrill of speeding or the convenience of driving home drunk if he or she knows the cost of an accident could prove catastrophic.

That some drivers are not constrained by price does not invalidate the existence of moral hazard. In theory, insurance companies adjust for the distribution of drivers on the risk-adverse-to-reckless axis in their pricing of coverage premiums. They modify how their clients drive by raising the costs of coverage to a point where it deters anti-social behaviour, yet is still affordable. A well-informed insurance market estimates the optimum balance between risk and premiums by compiling information both on the risk characteristics of its clients and on the likely range of awards paid out when accidents do occur.

This is where tort penalties for automobile injuries play a vital role in the efficient workings of the insurance market. Court awards for economic and personal losses provide a reliable guide to the true cost of an injury. The problem with awards set under a no-fault insurance regime is that they fail to reflect the complete cost of injuries both to individuals and to society.

This failure under no-fault insurance to generate complete information on costs can, in turn, lead insurers to under-price premiums which thus, in effect, subsidizes reckless drivers. This is the moral hazard effect.

In the case of BC, no-fault insurance may add to the existing risk of an induced moral hazard effect

created by a monopoly insurance provider, ICBC. A monopoly insurance provider, mandated by law not to fully differentiate risk in setting premium prices for various client categories, already charges low risk clients too much, and high risk clients too little. (The specifics of the interaction between a public monopoly insurance provider and no-fault insurance regime will be investigated in later Institute research.)

However long the answer, both experience and theory suggests that no-fault insurance fails to meet the grade of equity and efficiency. Awards to victims are less than the true cost of their injuries. Hidden costs are passed on to either the least able—the victims themselves—or the least suspecting—the taxpayer. Bad drivers are subsidized at the expense of good drivers and, as a result, risky driving is rewarded. As reckless drivers are unchecked, accidents increase, and everyone ends up paying more.

As Sheldon has worked independently, his conclusions and work do not necessarily reflect the views of The Fraser Institute and its Directors. The Institute does, however, welcome his contribution and hopes that it will shed important light on this controversial topic. Public responses to this document are welcome and should be addressed to Owen Lippert at The Fraser Institute.

—Owen Lippert

## Executive Summary

This paper examines whether or not auto insurance reform is appropriate for British Columbia. In recent months, BC's New Democratic Party (NDP) government and the Insurance Corporation of British Columbia (ICBC), the public provider of insurance, have repeatedly claimed that costs, particularly in terms of settling bodily injury claims, have been increasing at a rate over and above what one would anticipate given the growth in the number of drivers and the general level of inflation.

To substantiate their claims, ICBC contracted the consulting firm KPMG to conduct a number of studies on its behalf. These studies examined the cost history of ICBC, and set out a number of insurance product changes that would help alleviate the financial concerns of the corporation. The product reforms suggested by KPMG were all variations of no-fault insurance which were designed to restrict access to courts and to contain the level of premiums at current levels. Further, Mr. Doug Allen was appointed in late 1996 to head a commission that would look into auto insurance reform. The conclusions of this commission were twofold.

The first conclusion was that a range of measures should be introduced to help reduce the level of accidents. Second, in terms of product reform, two options from the KPMG analysis were put forward. One option amounted to a pure no fault scheme, with access to the court system denied. The second option retained access to the courts but imposed a heavy deductible on pain and suffering awards. Both options increase the benefits currently available to at-fault drivers.

This study notes a number of concerns with respect to the analysis conducted by KPMG and the Allen Commission. Of primary concern is that the work of KPMG received severe criticism by oppo-

nents of no-fault insurance who claimed that KPMG did not properly analyze the sources of the cost increases of ICBC, and further, that the cost projections provided by KPMG were based on data that was not replicable in the absence of data from ICBC. Also, a question exists as to the extent of the so-called "financial crisis" at ICBC. Moreover, a body of empirical evidence has been published which suggests that the introduction of no-fault schemes in other jurisdictions has increased the number of accidents and fatalities through moral hazard effects. This later point was not acknowledged by either the Allen Commission nor in any of the KPMG reports.

At the time of writing the NDP government is pondering whether or not to introduce a new insurance product in BC. A host of possibilities exist for reform. In this article's conclusion, additional cost saving measures are suggested, all of which reduce the insurance coverage available to accident victims. These measures include fining at-fault drivers a flat rate for each accident caused and imposing a significantly smaller deductible on pain and suffering awards. The calculations performed with limited data suggest that a deductible of \$10,000 on pain and suffering awards would achieve significant savings for ICBC. Additionally, scope for additional savings is possible with the adoption of alternative dispute resolution procedures, along with a number of ways in which ICBC manages its own affairs. The latter include better management of investment funds and improved performance in collecting receivables.

As has been widely acknowledged, including by the Allen Commission, the only certain way to reduce insurance costs is by reducing the number of motor vehicle accidents. No-fault insurance schemes cannot by themselves contain the growth in insurance costs.

## Introduction

During the past six months, British Columbians have seen a much publicized debate between the Insurance Corporation of British Columbia (ICBC), which has been considering implementing a no-fault insurance scheme, and an array of interest groups who are vehemently opposed to any new restriction on access to the courts. The fundamental issue in the debate is whether the current liability system in B.C. is sustainable in light of average premiums rising by 155 percent since 1986. Furthermore, according to Mr. Ken Hardie, Manager of Public Affairs at ICBC, the current system "will force premiums up by another 40 percent by the year 2000 if nothing is done" (letter to the *Vancouver Sun*). To compound ICBC's difficulties, the provincial New Democratic Party government announced in 1996 that ICBC would not be allowed to increase premiums for the following two years.

This paper examines no-fault insurance and evaluates the available empirical evidence about no-fault's effectiveness in other jurisdictions where it has been introduced.

This report is broken down into six sections. Section 1 defines no-fault insurance. Section 2 addresses the situation in British Columbia. The issues include:

1. Are insurance premiums in B.C. too high? What is the acceptable level of auto insurance premiums in the province?
2. Is ICBC facing a crisis?
3. What are the options open to ICBC and the provincial government?
4. Can no-fault insurance successfully reduce costs while providing adequate coverage?

Section 2 also contains a financial review of the Insurance Corporation of British Columbia and discusses the financial and institutional issues and challenges it faces. Section 3 provides a brief presentation of the two no-fault options put forward by the Automobile Insurance Review Team that was appointed by the B.C. government in December 1996.

Section 4 describes the intellectual origins of no-fault insurance and examines the relative merits of such a system compared to the tort or liability system. Particular attention is paid to social welfare considerations, notably efficiency and equity. The moral hazard arguments against no-fault insurance are also considered. A description of no-fault schemes in other jurisdictions is given in Section 5.

Section 6 examines the available empirical evidence of the success or failure of no-fault auto insurance schemes, with particular emphasis on how the introduction of no-fault insurance has affected accidents and premiums. Finally, the conclusion contains potential solutions for ICBC to consider to reduce its costs and operate more efficiently.

This paper will not argue the case for or against privatizing ICBC. Rather, the later sections of this report will highlight potential changes that ICBC could implement in terms of the conduct of its operations and in terms of insurance product changes.

## Section 1: What is No-Fault Insurance?

A broad spectrum of auto insurance systems are in place throughout North America and the rest of the world. The range of systems is bordered by two polar positions. At one extreme is the so-called “pure liability system”; at the other is a pure no-fault system.

How do they differ? The pure liability system allows the innocent victim (the driver who was not deemed to be at fault) full and unlimited access to the courts for the purpose of suing for any losses, economic or otherwise, that have arisen from a traffic accident. On the other hand, in a pure no-fault system, victims of auto accidents have no access to the courts to obtain damages for economic and non-economic losses. Instead, all benefits are determined by a set of predetermined rules that are put in place by the insurance company.

Between the two polar systems lie a host of what are commonly termed “partial no-fault schemes.” Their broad characteristics include a combination of both the liability (sometimes referred to as tort-based) and no-fault systems.

In addition, many no-fault systems have in place either a “verbal threshold” or a “monetary threshold.” In a verbal threshold system, the right to sue is taken away in all but the most serious cases. Whether or not the injuries are considered serious depends on whether they meet some predetermined threshold. A verbal threshold may take the form of allowing a victim to sue provided that “dismemberment” or “significant and permanent loss of an important bodily function” has been established. A monetary threshold system establishes a monetary amount that medical costs must exceed before the victim can pursue a liability claim.

## Section 2: The Insurance Corporation of British Columbia

This section will examine the financial performance of ICBC over the past two decades, paying particular attention to the pattern of costs, claims, and premiums over this period.

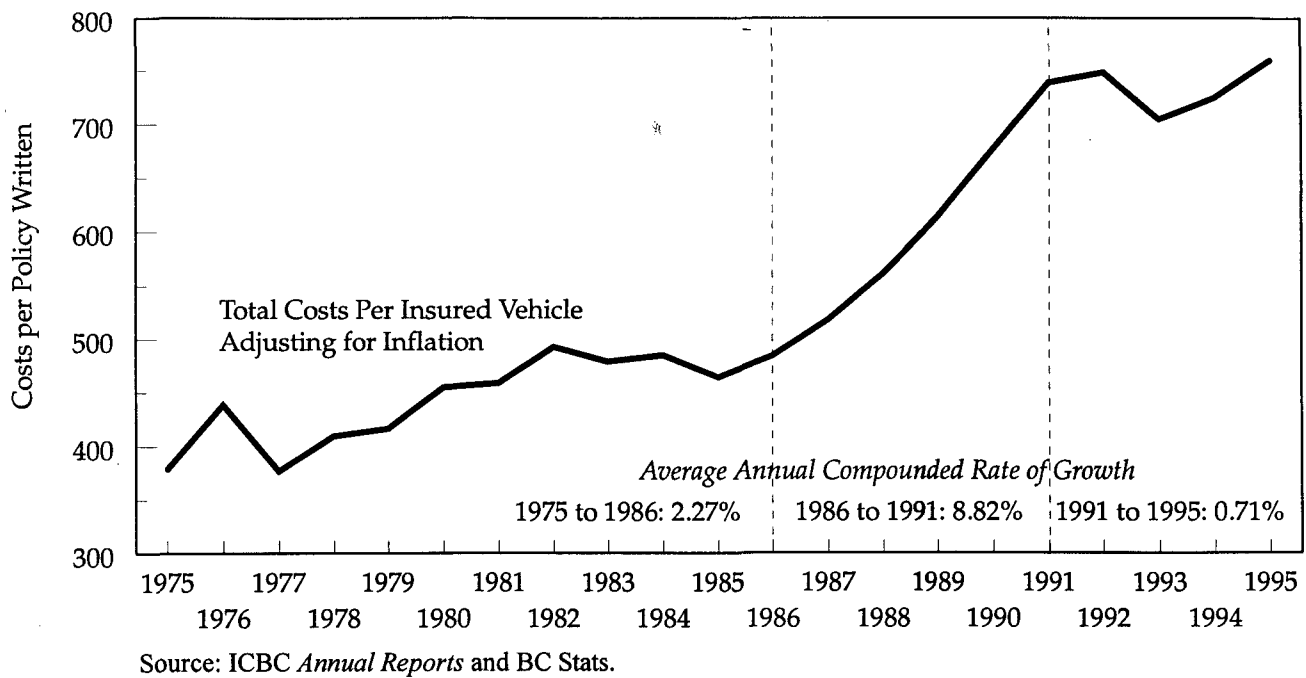
### Background

ICBC is a Crown Corporation which was created by the Corporation of British Columbia Act in 1973. It began operating in 1974 as a monopoly provider of a comprehensive and universal auto insurance regime for British Columbia. A report

by the Automobile Insurance Review Team<sup>4</sup> cited a number of reasons for ICBC’s creation. Many drivers were said to have difficulty finding insurance with adequate coverage. Private insurers were found not to honour policies after an accident, or charged large premium increases following an accident. Finally, concerns existed that a portion of the premiums paid in B.C. were funding jobs in insurance headquarters in Ontario.

4 British Columbia Ministry of Finance, *Automobile Insurance Review*, March 1997.



**Figure 1: Total ICBC Costs per Policy Written Adjusting for Inflation**

## What does ICBC insure?

ICBC is thought to control about 90 percent of the optional insurance market.<sup>5</sup> The mandatory coverage provided by ICBC includes third party liability, underinsured motorist protection, and first party liability.

## ICBC cost history: 1975 to 1995

Figure 1 shows the pattern of total ICBC costs per policy written, after adjusting for the effect of inflation. Total costs are made up of claims related expenses (costs of administering claims and payments to claimants) and payments, including administration, road safety, traffic safety initiatives, commissions to insurance agencies, and premium taxes paid to government. In 1995, about 85 percent of total ICBC expenses were in the form of payments related to settling claims. The data suggest that generally, costs have increased, with the

largest increases taking place between 1986 and 1991. Following 1991, total ICBC costs dipped before showing increases of 2.84 percent in 1994 and 4.83 percent in 1995. (Data for 1996 was not available at the time of writing). Analysis of ICBC's financial statements suggests that the corporation made a net profit in all but three (1992, 1993 and 1987) of the past 15 years.

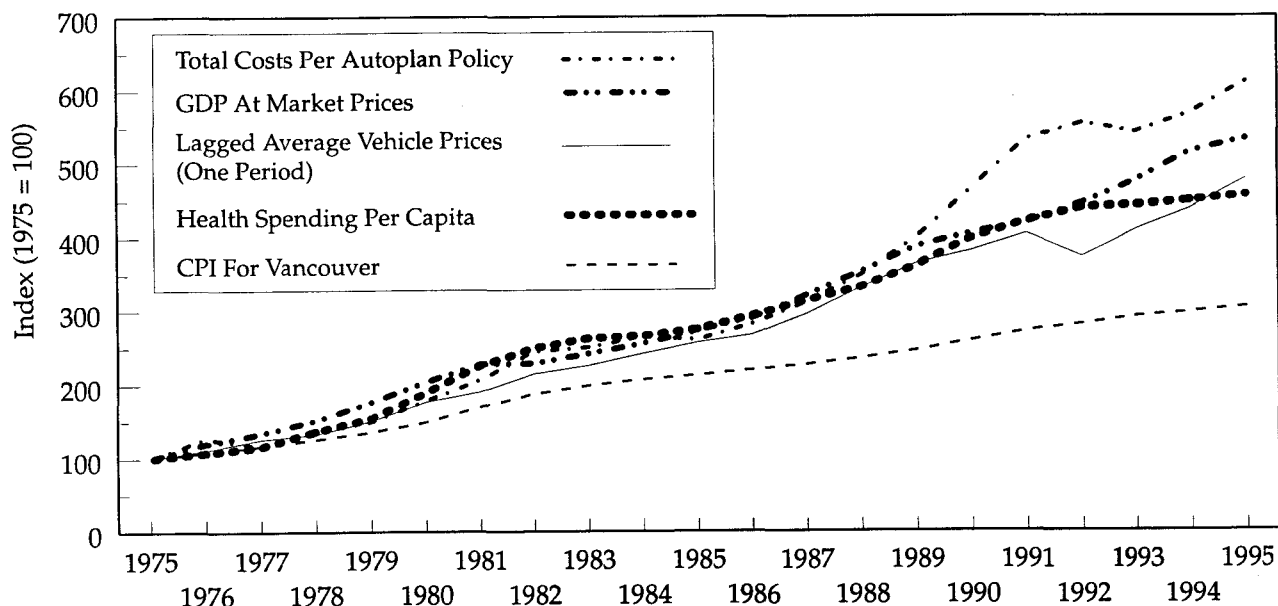
## Why ICBC costs have risen

Generally, ICBC costs have increased since 1974 at a rate over and above that expected, given the increase in the number of policies written and general price inflation. Some reasons for this follow.

1. A well established link has been identified between the level of economic activity and distances driven by the average motorist. A growing economy will be reflected in increased

<sup>5</sup> The optional coverage includes increased third party coverage, collision damage, comprehensive and specified perils (fire, theft and windshield) and loss of use.

**Figure 2: Total ICBC Costs Per Autoplan Policy and Other Economic Indicators (1975 = 100)**



Source: ICBC Annual Reports and BC Stats.

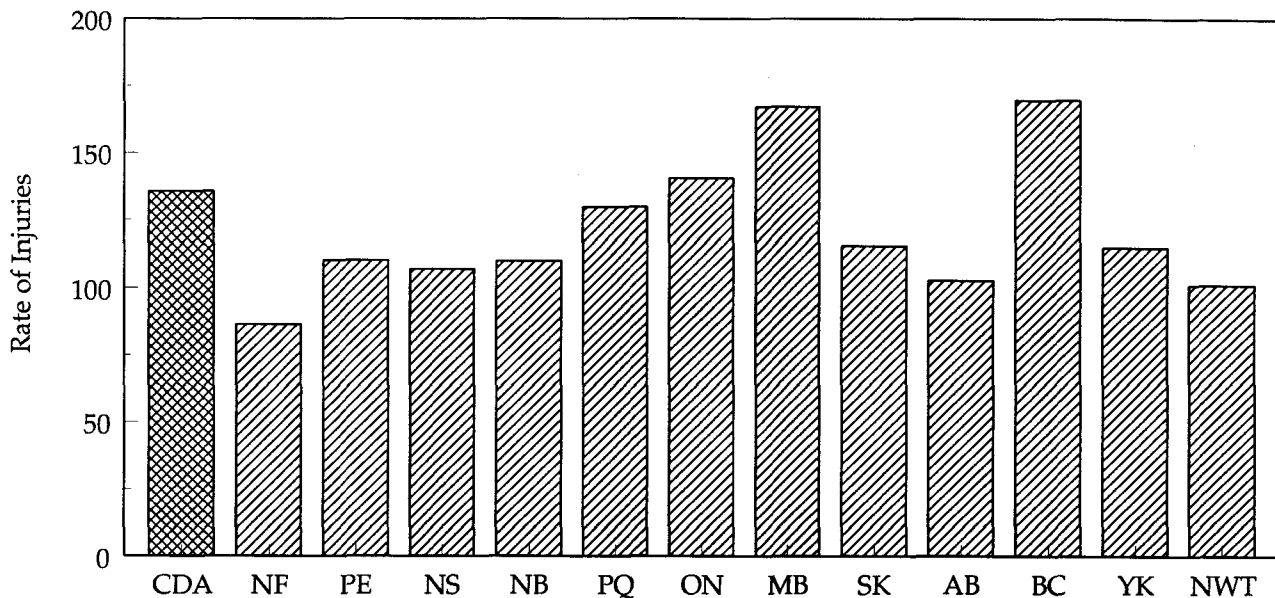
driving activity and, therefore, increases in the number of accidents and claims. Moreover, in times of economic growth, more individuals are likely to be in the labour market, which will add to the number of claims for wage loss. Another factor has been the increasing participation of women in the labour market. Since the absolute number of participants in the labour market has increased, wage loss claims will rise faster than if the same number of people increased their hours of work. Figure 2 shows the close relationship between the ICBC total costs per policy written (net of inflation) and British Columbia's Gross Domestic Product.

2. One of the major costs facing ICBC is the repair and replacement of motor vehicles. Figure 2 uses average vehicle prices as a proxy for average vehicle repair costs. It shows that the increase in ICBC total costs has been closely mirrored by increases in average vehicle prices, lagged by one year. The undeniable fact

is that vehicles are being built with increased sophistication and are far more likely than in the past to include expensive gadgetry which is costly to repair and replace.

3. A further factor that increases the costs facing ICBC is the price of medical care. Not only has the cost of medical treatment increased, but the range of treatments (for head injuries and psychological injuries, for example) has increased during the past decade. There has also been increased recognition of soft tissue injuries during the past decade.
4. The level of crime against motor vehicles has increased. Stolen vehicle claims in B.C. were approximately 28,000 in 1996, compared with just 4,876 in 1986.
5. The average cost of bodily injury claims has increased from about \$12,500 in 1985 to \$21,404 in 1995.<sup>6</sup> This increase is likely attributable to a combination of the factors alluded to in point 3.

6 Based on calculations performed by Gordon Adair of the B.C. Trial Lawyers Association.

**Figure 3: Injuries per 10,000 Motor Vehicles Registered, 1994**

Source: 1994 Canadian Motor Vehicle Traffic Collisions, Transport Canada.

The consulting firm KPMG, together with Eckler Partners Ltd., and Exactor Services Inc., suggested that the increase in bodily injury claims costs was explained by "social inflation." This is defined as "an increasing propensity and ability of claimants to maximize their awards, especially with respect to non-economic loss."<sup>7</sup>

The factors described in point 3 above, together with increasing workforce participation, offer part of the explanation for increased payments for bodily injury settlements. With legislated mandatory coverage, premiums increased due to non-insurance factors. This may be a small, but nonetheless significant increased cost.

6. In 1992, uninsured motorist protection became mandatory, whereas in 1985 only 60 percent of BC's drivers had such coverage.

### The problems facing ICBC

The announced freeze on ICBC premiums by the provincial government has put ICBC in an unfortunate position; it faces cost increases with little opportunity, at least for the time being, to match these increases with premium increases. If we assume that inflation in BC will increase at 2 percent per annum, the impact of the imposed premium freeze is estimated to cost ICBC \$47.8 million in lost revenue per year (based on 1995 premium revenues). In addition, ICBC is faced with increasing costs as a result of the following:

1. Amalgamation with certain functions of the Motor Vehicle Branch (costs involved were estimated by KPMG to be up to \$4.4 million in 1996 and \$58.0 million in 1997, depending on funding arrangements with the provincial government).<sup>8</sup>

<sup>7</sup> KPMG, *Motor Vehicle Insurance in British Columbia At The Crossroads*, Volume I, pp. 20.

<sup>8</sup> KPMG, *Motor Vehicle Insurance in British Columbia At The Cross Roads*, Volume II, pp. VI-2.

2. ICBC has also incurred substantial expenditures on photo radar technology and other road safety initiatives. According to KPMG, expenditures on photo radar alone are expected to be \$43.2 million in 1996, and \$33.7 million in 1997. Other auto insurance providers in B.C. are not contributing to accident prevention programs and safety measures, making for an uneven insurance playing field.
3. Premium taxes paid by ICBC increased from \$7 million in 1987 to \$90 million in 1995. The introduction of the Goods and Services Tax (GST) has also put pressure on ICBC finances.
3. The emergence of Canadian Direct Insurance as a direct competitor of ICBC has compounded the problems the corporation faces operating within the constraints of non-discriminatory price setting legislation. ICBC will clearly lose good drivers if they are offered lower premiums and similar coverage elsewhere. The logical conclusion is that ICBC will be left with a smaller insurance pool containing relatively more high risk drivers (who will not get coverage from Canadian Direct Insurance), leading to further pressure on premium levels to rise.

### Other problems facing ICBC

1. B.C. has one of the highest motor vehicle casualty rates in Canada (see figure 3). In terms of injuries per 10,000 motor vehicles registered, B.C. has the worst accident rate in Canada. In terms of fatalities per 10,000 vehicles registered, B.C. is equal to Alberta, and had fewer, proportionately, than the Yukon, Prince Edward Island, Saskatchewan, and Quebec.
2. Data on traffic accidents clearly suggest that young drivers (especially males under age 25) are far more likely to be involved in a collision than female or older drivers.<sup>9</sup> (This may be attributed to a combination of limited driving experience and a higher propensity to drive carelessly). However, ICBC is not allowed to charge different premiums based on age, although premium discounts are in place for those with a record of safe driving. In effect, therefore, the drivers in the lower risk classes are subsidizing the high risk drivers. (One can argue that high risk drivers would have more incentive to drive carefully if higher premiums were imposed on them early in their driving careers than at present.)
4. An examination of ICBC's financial statements suggests that the corporation's level of investment income has been sufficient to offset the losses that it has incurred in its underwriting capacity in all but three of the past 11 years. In 1995, investment income totalled \$315 million, while underwriting losses were \$253 million. The average return on investment income was approximately 7.4 percent in 1995. The investment portfolio held by ICBC in 1995 amounted to \$4.5 billion and was composed of almost 90 percent bonds, with equities representing less than 5 percent of the value of the investments. The question arises as to whether or not ICBC is able to manage its funds in a manner that will maximize returns over the long term. A 1 percent increase in the average return on investment in 1995 would have given ICBC increased revenues in excess of \$40 million.

### Is no-fault insurance or major product reform necessary for BC?

ICBC's financial statements suggest that claims costs will increase at a rate above the level of inflation, even after adjusting for the number of insured vehicles. Taking into account the pre-

9 Source: 1994 Motor Vehicle Traffic Accidents, Motor Vehicle Branch, Ministry of Transportation and Highways.

**Table 1: Savings to ICBC from a Reduction in Property Damage, Collisions, Fatalities, and Bodily Injuries**

	Average Cost to ICBC in 1995	Number of Claims Settled in 1995	Estimated Decrease In the Number of Claims if Accidents or Property Damage Incidents Were Reduced by 1%	Estimated Savings to ICBC for a 1% Reduction in Accidents
Per Property Damage Claim	\$2,288	226,009	2,260	\$5,170,880
Per Bodily Injury	\$20,509	38,829	388	\$7,963,440
Per Fatality	\$100,000	405	4	\$405,000
Source: ICBC, "Average costs to ICBC for fatalities, bodily injuries, and property damage accidents." Data is for 1995. Internal data obtained from ICBC, author's calculations.				

mium rate freeze imposed by the NDP government in 1996, is product reform necessary to safeguard ICBC's financial viability?

A number of options exist.

Opponents of no-fault insurance suggest that product reform is unnecessary, and that if ICBC needs to contain costs it should concentrate on the source of the problem at hand, that is, reducing the number of motor vehicle accidents. In a report conducted by the Auto Insurance Review Team,<sup>10</sup> a range of accident prevention measures were recommended, including improved driver training, increased measures to combat drunk driving, graduated licensing, and implementation of a comprehensive traffic and safety education program within the B.C. school system. Using data provided by ICBC, it is estimated that a 1 percent reduction in bodily injuries, fatalities, and property damage incidents could save at least \$13 million per year. Table 1 gives the details.

In addition, KPMG noted that "significant" but unquantified savings could be gained if ICBC

adopted improved dispute resolution processes, extended centre hours in urban locations, and used non-office based adjusters or estimators. Also, KPMG estimated that ICBC could save as much as \$22 million in the form of administrative and efficiency improvements. An internal ICBC study also reported that procedures to combat fraud and exaggerated claims could result in savings of between \$70 million and \$100 million.

Additional estimates of cost savings that ICBC could make were included in the report of the Automobile Insurance Review Commission. In this document, accident prevention, theft and fraud reduction, and service enhancement changes (in product distribution, moving from lump sum to structured settlements, and using second hand parts) were estimated to have the potential of saving ICBC \$100 million in 1998.

The Automobile Review Commission also estimated that ICBC could save money by implementing road design alterations. Improved vehicle design to limit theft and fraud could also reduce ICBC's costs.

10 *Automobile Insurance Review*, March 1997.

## Section 3: Alterations in the Insurance Product Recommended by the Automobile Insurance Review Team

The Automobile Insurance Review Team headed by Doug Allen Q.C., recommended the government adopt one of two options as a means of reducing ICBC's costs while keeping average insurance premiums constant at \$975 through the year 2000.

### Product Option One

The first option proposes a measure to alter the current liability system. A distinction remains between the at-fault and innocent claimants, and access to the courts is allowed when no settlement arises from mediation or negotiation. However, the following important changes to the current system are proposed:

1. Pain and suffering awards are subject to a deductible of \$35,000.
2. Wage loss awards are to be tied to net income, not gross income as is currently the case. Awards will also be reduced if the claimant gets compensation from the Canada Pension Plan or Employment Insurance.
3. The provision of cost of care awards is to be managed by the insurer, with all persons being treated the same, regardless of fault.
4. Benefits for at-fault drivers are to increase to a maximum of \$400 per week from the present maximum of \$300 per week.

5. Rehabilitation and medical expenses are to be increased from \$150,000 to no lifetime financial limit for all accident victims, regardless of fault.

### Product Option Two

The second product option recommended by the Allen Commission is a pure no-fault system which replaces the right of access to the courts with an alternative dispute resolution process. No distinction is made between the at fault claimant and the innocent victim. The main features of this plan are as follows:

1. Income replacement benefits are set at 100 percent of net income to a maximum of \$650 per week.
2. There is no lifetime limit on medical and rehabilitation care.
3. There is no compensation for pain and suffering, and limited compensation for loss of function.
4. Wage loss awards will be tied to net income, not gross income as is currently the case. Awards will also be reduced if the claimant receives compensation from the Canada Pension Plan or Employment Insurance.

## Section 4: Why No-Fault Is Being Considered In British Columbia

### The intellectual origin of no-fault insurance

Supporters of no-fault insurance suggest that it has a number of advantages over tort liability compensation schemes. In response to concerns that tort systems were inefficient and unfair, no-fault schemes were considered to offer a number of advantages. As Witt and Urrutia (1983) have noted, no-fault schemes have the potential to:

1. Provide adequate compensation for economic losses to any injured accident victims, regardless of fault.
2. Reduce relative costs or increase relative benefits to consumers.
3. Reduce litigation and investigation costs.
4. Improve the predictability of relative loss costs or prices for auto insurers because they would have more information on their potential claims.

Bruce (1984)<sup>11</sup> suggested that a number of proponents of no-fault insurance schemes believe the hypothesis that the threat of tort action or tort penalties cannot improve driver behaviour or deter drivers from causing accidents. They gave a number of reasons for this possibility. First, it is difficult to assess "cause" in many accidents. Second, penalties do not alter driver behaviour and, finally, liability insurance removes the impact of tort penalties from drivers who cause accidents.

Those who believe the hypothesis assert that driving is a complex task, and that drivers are re-

quired to make between 1 and 3 decisions per second, to monitor 10 or more highway and traffic events per second, and to undertake 30 to 120 driver actions per minute.<sup>12</sup> The hypothesis has been refuted by insurance adjusters (see, for example, Marryot 1968) and by the fact that, as Bruce noted, the vast majority of accident cases are settled out of court.

It has been suggested that tort penalties are effectively removed for drivers who cause accidents because they are protected from their actions with liability insurance. If true, one might expect drivers to exert moral hazard type behaviour, or just plain behave irresponsibly. This suggestion has been eloquently addressed by Bruce (1984), who essentially showed that "safe driving discounts" allow, in many jurisdictions, significant reductions on premiums relative to the regular premiums, and that the penalties for drunk driving and other serious driving offenses are not trivial.

Economic theory indicates that price and quantity demanded are inversely related. That is, for all other factors held constant, an increase in the price of driving will cause bad driving to decrease. Conversely, one would probably expect bad driving to increase if the cost of bad driving (the threat of increased premiums or the value of time that an individual guilty of bad driving would have to spend in attending court or in participating in the legal system) decreased. Under a no-fault system, therefore, *the costs of driving badly will decrease.*

Some argue that it is simply not rational for an individual to drive dangerously. The potential

11 The Deterrent Effects of Automobile Insurance and Tort Law: A Survey of the Empirical Literature. *Law and Policy*, January 1984.

12 Platt, F. (1962) "Traffic Safety Research." Madrid: Fourth World Meeting, International Road Federation, October.

threat of serious injury or death means that we drive as well as we can. This is important because it suggests that moral hazard does not exist, and driving behaviour would not change even under the presence of different driver incentives. Fortunately there is evidence that finds that individuals *will* evaluate the expected loss in well being from dangerous driving (potential fines, premiums, injuries, or fatalities, for example) in relation to the expected gain in well being from dangerous driving (this could be derived from the “thrill” of fast driving or the satisfaction gained from reaching an appointment on time, for example). In calculating expected gains or losses in satisfaction, one should evaluate the value of the gain or loss together with the probability of the event occurring. Platt (1962) estimated that the probability of a fatal accident for a 20 minute urban trip as being in the range of 1:1 million to 1:1.5 million.

Whether one supports the notion of no-fault insurance depends on a number of critical parameters. If one believes that most accidents simply cannot be helped, and are merely the result of an “honest mistake,” no-fault insurance, by providing the same compensation to all victims regardless of fault, is appealing. Not only are all individuals compensated in the same way, but, in theory at least, costs of settlements can be significantly reduced if access to the courts is denied and settlements for economic and non economic losses are restricted. Moreover, it has been suggested that significant savings from a reduction in lawyers fees and from faster processing of claims can be accrued under a rules-based system. These savings, if realized, can then be used to contain the growth of premiums.

For those of the opinion that auto accidents are in the main caused by negligence, tort-based insurance systems provide the correct incentives for

drivers to take due care and attention. Those found to be at fault receive significantly fewer benefits (in terms of income loss payments, for example) than the innocent victims who have recourse to the court system to seek payments to fully compensate them for their losses as a result of the accident.

## Transactions costs and adverse selection

In the operation of an insurance market, it is necessary to incur certain administrative costs. Contracts have to be drawn, buyers and sellers have to be brought together, and a set of rules and regulations must be written. Other costs are also incurred. These include the costs to the seller of the insurance contract of assessing the degree of risk presented by a potential buyer, or the probability that the event against which the individual is insuring will actually occur.

In the case of auto insurance, there are a number of variables which may influence the probability of a car accident occurring. These factors include the distances driven by the policy holder, and the amount of driving experience of the insured. (Age is a good proxy for this.)

In addition, the probability of an accident will be influenced by a number of factors that are within the control of the policy holder, including, for example, the amount of care taken by the driver, and whether or not the driver decides to drive within the posted speed limits.

The problem facing insurance companies becomes one of efficiently assigning to each policy holder the risk class to which he or she belongs for the purpose of setting a “fair” premium.<sup>13</sup> The practical difficulties of assessing risk for each in-

13 Fair in this context is a technical term which means that, net of administrative costs, payouts on policies are equal to what is paid in premiums.



dividual policy holder necessitates insurance companies to group policy holders into “risk classes,” which are based on the results of statistical analysis of accident rates for policy holders by factors such as age and gender. In a competitive market, any of the low risk individuals who are faced with a premium that they feel is inappropriate and is above what they are willing to pay to be relieved of their risk will choose not to buy insurance from the company, but instead, seek it elsewhere. If a significant number of low risk drivers follow this behaviour, the insurance company will be faced with relatively more high risk individuals in their insurance pool, which will lead to increased premiums, and thus encourage even more low risk drivers to leave the pool. This process is known as *adverse selection*, in that the average premium, which is unfair to good drivers, will discourage them from including themselves in the insurance pool. Unfortunately then, the people left in the insurance pool are made up of the most risk averse “low risk” drivers, and the high risk drivers who will be happy to pay relatively high premiums because they know that there is a greater probability that they will be involved in an accident.

### Moral hazard

With respect to driver behaviour, economists use the term “moral hazard” to describe the negative effect that insurance has on an individual’s incentives to avoid losses. Moral hazard describes the situation that arises when insurance has a detrimental effect on the care an individual takes to prevent loss. In the example of car insurance, moral hazard exists if the purchased insurance lessens an individual’s incentives to drive safely. As discussed by Winter (1992), for moral hazard to be present, there are two necessary conditions. First, the insured risk is influenced by the deci-

sions taken by an individual after the insurance contract is signed. Second, the care and activity levels of the individual cannot be costlessly specified in the insurance contract and enforced by the insurer. Clearly, both of these conditions are present in the automobile insurance industry. This leads to the conclusion that driver behaviour which reflects moral hazard is possible.

### Social welfare implications of no-fault insurance

From the social welfare standpoint, the central consideration boils down to whether net benefits to society are maximized in a no-fault system or a liability insurance scheme. <sup>14</sup> As has already been noted, supporters of no-fault insurance point to benefits that can be gained in administering claims in a more timely fashion without lawyers. On the other hand, supporters of liability systems point out that no-fault insurance systems, by removing penalties for those at fault in motor vehicle accidents, can lead to increased accidents because of moral hazard concerns. This is seen as imposing additional costs on society over and above any savings that may be realized through administering claims in a rules-based system. When evaluating no-fault schemes, one should also include the impact that thresholds may impose on the claims process. Claimants who are near to the injury threshold may seek advice as to how they can increase their claim to become eligible for compensation.

### Is no-fault insurance fair?

A further consideration in evaluating no-fault and liability-based systems lies in the principal of fairness. In particular, are victims of traffic accidents treated fairly in a rules-based system? Under a tort system, the driver who was not at

14 R.A. Devlin, (1993), “Automobile Insurance in Ontario: Public Policy and Private Interests,” *Canadian Public Policy*, XIX:3, pp. 298-310.

fault has the ability to seek compensation through the courts if a settlement cannot be reached with the insurance company through arbitration or mediation. There are several well documented circumstances where no-fault schemes have come under criticism.<sup>15</sup> They include:

1. Payments for loss of enjoyment of life (pain and suffering) are often reduced severely under no-fault schemes (often through the use of monetary or verbal thresholds).
2. Individuals who are seriously injured while in full time education, but do not have any record of full time, regular employment, are often treated as having lost earnings on the basis that they would have earned an "average" salary. This is the case in Saskatchewan, for example. Therefore, compensation does not reflect earnings potential.
3. A person in full time employment earning a net salary in excess of the set limit on income replacement benefits will not be compensated fully for their loss of earnings.
4. Payment under a fixed compensation scheme may under compensate individuals who have irregular work patterns or who are self employed. Recognition of potential earnings of someone in a business that is improving does not occur in no-fault schemes.

## Section 5: No-Fault Insurance in Other Jurisdictions

### Quebec

Quebec was, until recently, the only jurisdiction in North America that had a pure no-fault system. It was introduced in 1978. Quebec, like British Columbia, has a government monopoly supplier of auto insurance. As described earlier, this system has eliminated the right to sue of all victims of auto accidents. British Columbia, Alberta, and the Maritime provinces have an add-on no-fault auto insurance system. In British Columbia, all accident victims (regardless of fault), are entitled to a set of benefits that include the provision of up to \$150,000 in medical and rehabilitation expenses, and up to \$300 per week (or 75 percent of gross income) as compensation for lost income. The right to sue is "added on" to the no-fault benefits that all victims receive. Innocent victims

can seek redress through the courts to obtain their full wage loss and other payments, including up to \$250,000 for "pain and suffering" payments in addition to compensation for cost of care.

### Manitoba and Saskatchewan

Manitoba is the second jurisdiction in North America that currently has a pure, no-fault insurance system. It was implemented on March 1st, 1994. Insurance is provided by a monopoly supplier, the Manitoba Public Insurance Corporation. On January 1st, 1995, Saskatchewan Government Insurance, the public provider of auto insurance in Saskatchewan, instituted a no-fault auto insurance scheme. The details of this particular scheme will not be surveyed here,<sup>16</sup> other than that it is noted that the scheme includes provisions for re-

<sup>15</sup> See Carr (1996), for example.

<sup>16</sup> See PIPP, *A Personal Injury Plan Update*, Volume 1, Issue 1, March 1996, a newsletter about the Personal Injury Protection Plan introduced by Saskatchewan Government Insurance.

habilitation and medical expenses, income replacement benefits, death benefits, and permanent impairment benefits. In Saskatchewan, the right to sue for losses is limited to special circumstances.

## Ontario

Ontario introduced no-fault insurance under a verbal threshold no-fault system in 1990 and, in 1994, the right to sue for economic loss was completely eliminated. In November 1996, legislative changes in Ontario were introduced which in-

**Table 2: Summary of Changes included in Bill 59 in Ontario**

	Bill 164 (Before November 1st, 1996)	Bill 59 (After November 1st, 1996)	After November 1, 1996
Right to Sue for Economic Loss	Not allowed	Allowed	As per Basic Policy
Right to Sue—Pain and Suffering	Tort access was only allowed to those with very serious injuries.	Tort access was only allowed to those with very serious injuries.	Tort access was only allowed to those with very serious injuries.
Income Replacement	Pays up to \$1,000 per week.	Pays up to \$400 per week.	You can purchase added coverage in increments of \$200 per week to provide up to \$1,000 per week of coverage.
Medical, Rehabilitation & Attendant Care	Pays up to \$1 million to cover medical and rehabilitation expenses and depending on the injury, \$3,000, \$6,000 or \$10,000 per month for attendant care expenses.	Pays up to \$100,000 to cover medical and rehabilitation expenses and up to \$72,000 for attendant care expenses. For catastrophic injuries, pays up to \$2 million for all medical, rehabilitation, and attendant care expenses.	You can purchase an additional \$1 million coverage.
Indexation	Included	No coverage	You can purchase adjustments to reflect cost of living increases.
Death	Based on deceased person's income, this benefit pays a minimum of \$50,000 to a maximum of \$200,000 to a surviving spouse and \$10,000 to each surviving dependant.	Pays \$25,000 to a surviving spouse and \$10,000 to each surviving dependent.	You can purchase additional coverage up to \$50,000 to a surviving spouse and \$20,000 to each surviving dependant.
Funeral	Pays \$6,000	Pays \$6,000	You can purchase an additional \$2,000 of coverage.

Source: Zurich Canada.

cluded restoring the right to sue for economic losses, and a sharp reduction in the level of maximum allowable income replacement benefits from \$1,000 per week to \$400 per week. These changes are outlined in Table 2.

## The United States

Nine American states currently have some form of no-fault insurance. Michigan and New York, for example, have a verbal threshold system which allows access to the tort system provided that victims' injuries are deemed to be sufficiently serious, as defined by the law in each state. Interestingly, three U.S. states (Pennsylvania, Kentucky, and New Jersey) have a combined choice system, which allows the purchaser of auto insurance to choose between a no-fault and a tort based system. Purchasers of the no-fault plan are not allowed to sue for damages unless their injuries exceed the threshold level. A price differential has been set for the two policies.

## Australia and New Zealand

No-fault insurance was introduced in New Zealand in 1974 and in three Australian states—Victoria (1974), Tasmania (1976), and Northern Territory (1979). New Zealand and Northern Territory abolished the right to sue altogether, while Tasmania and Victoria placed restrictions on the right to have access to the courts.

In Victoria, the Transport Accident Commission became the sole provider of transport accident personal injury insurance, providing access to the courts by a combination of both descriptive and monetary thresholds depending on the circumstances surrounding each individual accident. In New Zealand, all victims of accidents can apply to a government body for accident compensation.

## Section 6: The Empirical Evidence Related to the Impact of the Introduction of No-Fault Insurance

### Traffic accidents and fatalities

#### Quebec

In an earlier survey, Sheldon (1996) examined the research that has been conducted regarding the impact of the introduction of no-fault insurance on the number of accidents—fatal and non-fatal—and on the level of premiums. Two comprehensive empirical studies have been conducted to assess the impact of the introduction of a pure no-fault system in Quebec in 1978. Gaudry (1992) used a comprehensive econometric model using monthly data from 1956 to 1982 which included

over 40 explanatory variables. These variables include:

- gasoline and diesel prices
- the price of vehicle maintenance
- the quantity of personal and utility vehicles
- the proportion of small cars
- the proportion of cars equipped with a safety belt
- speed limit reduction and compulsory belt use introduced in 1976
- breathalyser law introduced in March 1973

- higher penalties for driving infractions initiated in April 1982
- police patrol frequency and strikes
- urban transit strikes
- intercity bus strikes
- weather conditions
- alcohol and drug consumption

The results suggested that fatalities increased by 6.8 percent after the introduction of no-fault insurance. Of this nearly 7 percent increase, 3.3 percent is attributed to the impact of a flat-rated premium structure.

Devlin (1992), using econometric techniques, but a different econometric model, arrived at results that were similar in magnitude to Gaudry's. Using data from Ontario and Quebec, Devlin included the following independent variables, among others, to model the no-fault experience:

- The proportion of male drivers under the age of 25
- The total number of vehicles driven
- The decrease in the legal drinking age in both provinces
- The enforcement of seat belt legislation
- A time trend

Devlin found that the number accidents involving bodily injury increased by about 9.6 percent after the introduction of no-fault insurance.

### *Australia and New Zealand*

McEwin (1989) estimated the impact of the introduction of pure no-fault schemes in New Zealand (1974) and in the Northern Territory in Australia (1979). In this study, fatal accidents were found to increase by up to 16 percent after no-fault insurance was introduced. The explanatory variables

adopted by McEwin to explain road fatalities included variables to measure police force strength, population, the quality of highways, the proportion of motorcycles in each jurisdiction, the proportion of the population between the ages of 17 and 25, expenditures on alcohol, average weekly earnings, and the number of kilometres driven.

### *The United States*

Five studies were examined which estimated the impact of the introduction of no-fault schemes in the United States. Two studies found no significant increase in the number of accidents, while three studies concluded that accident rates increased by between 2 and 15 percent. Given that a myriad of so called partial no-fault schemes were introduced in the United States (with some states adopting very low monetary thresholds and other states adopting verbal thresholds), it is not surprising that the empirical findings with respect to the impact of the introduction of no-fault insurance and the number of accidents was mixed.

### **Conclusion**

A body of empirical evidence exists which shows that in areas where pure no-fault insurance schemes have been introduced, fatal accidents and injuries have increased. This supports the contention that moral hazard does exist in the area of auto insurance.

### **No-Fault Insurance Schemes and Premium Levels**

#### *The United States*

Five studies which were concerned with the relationship between no-fault insurance schemes and insurance premiums were examined. One study found moderate increases in one jurisdiction—Florida—while a different study found large reductions in premiums in another—Massachusetts. Other studies found that no-fault insurance in-

creased premiums and/or total bodily injury loss costs. For instance, Johnson, Flanagan, and Winkler (1992) examined data from 47 American states from 1974 to 1985. Their findings suggested that when provision was made for medical payments, no-fault insurance led to increased total bodily injury loss costs.

As table 3 indicates, of the 15 states that had the highest increase in average liability premiums between 1989 and 1994, 10 had some form of no-fault insurance scheme operating.

The information outlined above suggests that the US experience of no-fault insurance has been less than successful in reducing premiums. Also of interest is that no US state has adopted no-fault insurance since 1976. On the other hand, since 1989, four states have repealed their mandatory no-fault laws.

### *Canada*

Unfortunately, because Saskatchewan and Manitoba introduced no-fault insurance schemes as recently as 1994, only limited data are available about the impact of these schemes on premiums and accident rates. To this author's knowledge, no comprehensive statistical analyses have been conducted to assess the impact of the introduction of no-fault insurance in Manitoba, Saskatchewan or Ontario, where no-fault insurance was introduced in 1990.

Table 4 details the percentage increase or decrease in the level of auto insurance premiums in the Canadian provinces that have no-fault insurance, together with changes in British Columbia's premiums. Taken as they stand, the data seem to indicate that Quebec and Ontario have had sharp

increases in their levels of average premiums since 1993. Manitoba, Saskatchewan, and British Columbia have also seen relatively modest increases, although Saskatchewan has had no premium increase since 1993. Obvious difficulties arise in making direct comparisons between areas that exhibit stark differences in their geographical, environmental, and economic characteristics (such as weather conditions, population density, and economic growth). The problem is further compounded given that, with the exception of Ontario, insurance is provided by a government run monopoly. Political influences have played a significant part in the price setting process.

**Table 3: Insurance Regimes and Premiums in the United States: States with the Highest Growth in Average Liability Premiums, 1989-1994**

State	Insurance Regime	Increase in Average Liability Premiums
Texas	optional no-fault	69.0%
Massachusetts	mandatory no-fault	68.9%
South Dakota	mandatory no-fault	64.2%
Nebraska	tort	63.7%
Utah	mandatory no-fault	59.2%
Hawaii	mandatory no-fault	63.7%
West Virginia	tort	57.6%
Kentucky	optional no-fault	57.2%
New Mexico	tort	52.2%
Rhode Island	tort	50.0%
Colorado	mandatory no-fault	49.8%
New York	mandatory no-fault	49.2%
Arkansas	optional no-fault	47.1%
Delaware	optional no-fault	46.9%
Wyoming	tort	46.0%
Source: National Association of Insurance Commissioners (1996).		

Significant problems arise if one attempts to draw conclusions about whether a pattern emerges between the presence of no-fault insurance, the type of insurance provider (public or private), and the level of average premiums. One must take extreme care to ensure that the level of insurance coverage is the same across jurisdictions and must take into account a multitude of economic and non economic factors that may have an impact on premium levels. Given the lack of data, the question of how insurance delivery systems affect premiums will not be analyzed in detail here.

**Table 4: Percentage Increase or Decrease in Auto Insurance Premiums in B.C. and No-Fault Provinces in Canada**

	1993	1994	1995	1996	Total
B.C.	9.5	3.2	1.8	0	15
Quebec	0	35	0	0	35
Ontario	9.2	11.8	11.3	-4.7	29.5
Manitoba	9.7	-2	-1	6.1	12.9
Saskatchewan	4.75	0	0	0	4.75
Note: Negative numbers indicate a decrease in premiums. Source: KPMG Consulting Group as cited in the <i>Vancouver Sun</i> , "Demystifying No-Fault Insurance," by Tom Barrett, Feb. 26, 1997, p. B4.					

### The impact of the introduction of no-fault insurance in Manitoba

Highlights from recent annual reports of the Manitoba Public Insurance Corporation include:

1. The average cost per claim increased by 5.4 percent during the 16-month period ended February 29th, 1996. The average cost per claim *fell* by 5.5 percent in the 12 months ended October 31, 1994.
2. The underwriting loss during the 16-month period ended February 29th, 1996 was \$151.072 million. The underwriting loss in the 12 month period ended October 31st, 1994, was \$63.506 million.
3. The loss for the year during the 16-month period ended February 29th, 1996 was \$58.045 million.<sup>17</sup> The *gain* for the 12 month period ended October 31st, 1994 was \$6.909 million. A payment of \$51.8 million dollars was set aside to cover bodily injury claim costs held over from the tort system.
4. If one adjusts for the 16-month reporting period,<sup>18</sup> fatalities *increased by 10.6 percent* during the year after the introduction of no-fault insurance, and *increased by 9.9 percent* during the 12-month period ended October 31st, 1994. The number of injuries *fell by 18 percent and 9.7 percent respectively* during the same two time periods. Note that injuries and fatalities are as reported by Manitoba Public Insurance. The data do not necessarily imply that injuries from traffic accidents have fallen, merely that *reported* injuries have fallen because of the reduced incentives to file a claim under the no-fault insurance scheme.
5. Operating Expenses increased from \$30.081 million in the year ended October 31st, 1994 to \$50.97 million in the 16-month period ending February 29th, 1996. Using a factor of 0.75 (12/16) to adjust for the different length of the reporting period in the financial statements, implies that the operating expenses for the 12-month period after October 1st were \$38.228 million. Therefore, operating expenses in the

<sup>17</sup> The 16-month reporting period was as a result of a change in the financial year end.

<sup>18</sup> This was achieved by multiplying by a factor of 12/16.

first 12 months after the introduction of no-fault insurance in Manitoba went up by an estimated 27.1 percent.

- Finally, the value of claims expenses during the 16-month period ended February 29th, 1996 was \$57.64 million. The value of claims expenses incurred during the 12 month period ended October 31st, 1994 was \$40.203 million. Adjusting the data by a factor of 0.75 yields the result that claims expenses increased by 7.53 percent between the two reporting periods.

The evidence to date may be interpreted to reveal that no improvement in the underlying economic performance of the company has taken place. Of course, only time will reveal whether or not no-fault insurance has improved the financial status of the insurance provider in Manitoba.

### No-fault insurance in Saskatchewan

Highlights from the 1995 Annual Financial Report of Saskatchewan Government Insurance include:

- Net Income for the year ended December 31st, 1995, was \$3.5 million. This compares with a net loss of \$93.8 million in 1994 and a net loss of \$18.8 million in 1993.
- Administrative expenses fell by \$744,000 to \$20.634 million in 1995. This represents a decline of 3.48 percent compared to 1994.
- The value of claims incurred fell to \$333.3 million from \$406.6 million between 1995 and 1994. This represents a reduction of 18 percent in 1995 relative to 1994.

The above data suggests that Saskatchewan Government Insurance did, indeed, improve its financial position in 1995. The main reason for this improvement was not from reduced administrative expenses, but from a sharp reduction in the number of injury claims submitted.

**Table 5: Insurance Premiums and Insurance Regimes**

	Average Premium (\$)	Insurance Regime
Vancouver	1,434	Add-On No-Fault
Toronto	1,794	No-Fault
Montreal	1,759	Pure No-Fault
Calgary	1,482	Tort
Edmonton	1,482	Tort
Ottawa	1,236	No-Fault
Halifax	1,209	Add-On No-Fault
Moncton	1,126	Add-On No-Fault
Winnipeg	871	Pure No-Fault
Charlottetown	786	Add-On No-Fault
Regina	774	No-Fault
St John's	1,677	Add-On No-Fault
Source: Runzheimer Canada. Based on a 1997, 4 door Ford Taurus GL Sedan, 3 Litre, 6 Cylinder. Vehicle is insured for private use. Cited in the <i>Vancouver Sun</i> , "Demystifying No-Fault Insurance," by Tom Barrett, Feb. 26, 1997, p. B4.		

At the time of writing, it is clearly too early draw concrete conclusions as to whether or not the introduction of no-fault schemes in Saskatchewan and Manitoba achieved their fundamental objectives. The financial results of Saskatchewan Government Insurance do suggest that, after the introduction of no-fault insurance in 1995, that entity's financial performance improved. The source of the improvement can be attributed, for the most part, to a sharp reduction in claims expenses, and to a higher level of investment income relative to the previous financial year. It remains to be seen whether or not Saskatchewan Government Insurance will continue to improve its performance in the future.



## No-fault insurance in Ontario

Unfortunately, no rigorous statistical analysis has been conducted to assess the impact of the introduction of no-fault insurance in Ontario. A threshold no-fault system was introduced in Ontario in 1990, and in 1994, the right to sue was completely eliminated. Jack Carr (1996a) noted that the initial impact of the policy change in 1990 was to stabilize premiums by reducing benefits to all accident victims by 47.7 percent. Premium increases amounted to 11.8 percent in 1994 and 9.5 percent in 1995.

## No-fault insurance in Victoria, Australia

According to KPMG, the average level of premiums in Victoria increased by only 4 percent between 1987 and 1995 after the introduction of no-fault insurance in 1987. In conjunction with the insurance product change, a thorough accident prevention initiative was introduced. This has served to provide significant reductions in fatalities and deaths. It is not possible to attribute the relative influence of the accident prevention measures and the insurance product reform in containing costs. What is clear is that the introduction of no-fault insurance cannot be the sole cause of the cost containment successes in Victoria. Moreover, costs of treatment, long term costs, and loss of benefit costs were reported in the 1996 *TAC Annual Report* to be increasing at a rate well above inflation.

## Conclusions and potential policy changes

Whether or not ICBC has the level of financial trouble that it has indicated in its numerous press releases is open to question. If ICBC's mandate is to break even on its insurance operations, it would need to reduce costs by between \$200 million and \$300 million (based on the financial information for the first three quarters of 1996). In the

absence of detailed financial information, including the full 1996 financial statements, one cannot judge whether or not the proposed major insurance product reforms set by the Automobile Insurance Review Team are in any way justified.

Several areas of serious concern surround the Automobile Insurance Review Team's product reform recommendations discussed in Section 3.

1. The BC government imposed a premium freeze, set at \$975, to the year 2000 as the constraint under which product reforms were to be assessed. In itself, this imposes severe penalties on ICBC.
2. The Automobile Insurance Review Team used the cost projections provided by KPMG and ICBC in assessing the level of operating deficit (and therefore the level of the rate stabilization reserve) in the years to 2000. In 1997, for example, the review team reported that ICBC will have an estimated operating deficit of \$385 million. The reliability of this figure is open to doubt, given that it appears to have come from projections of cost increases from KPMG that were neither convincingly explained nor could they be replicated in the absence of sufficient data from ICBC.

What is known is that ICBC reported a net loss of \$41.43 million for the first nine months of 1996 at a time when press releases from the company announced anticipated losses in 1996 of \$150 million. To compound the uncertainty, ICBC's financial statements include "claims incurred," which is an estimate of claims expected to be paid out in a given year. Scope exists to manipulate this estimate to make the operating position appear worse than it actually is.

What is clear, however, is that in the viewpoint of The Allen Commission, "Neither [of the proposed product reforms] can control the long term underlying increasing cost trend" (*Automobile Insurance Review*, p. 67).

This amounts to an admission that neither a pure no-fault scheme, nor a partial no-fault insurance scheme—in this case with a monetary threshold—can, in the long term, control insurance costs. In light of this statement, is fundamental reform of the insurance product in British Columbia desirable? Calculations to measure the cost savings for a deductible on pain and suffering payments are set out in the product reform options below. The Allen Commission, in Product Option One, recommended a deductible of \$35,000 on pain and suffering payments. I contend that a deductible of \$10,000, or perhaps \$15,000 on these awards, would save ICBC sufficient funds to offset any financial concerns, and if introduced with other cost saving measures contained in the Allen Commission final report,<sup>19</sup> would provide ample monies to increase the level of benefits paid to at-fault drivers. The basis for imposing a deductible on pain and suffering payments of \$35,000 (in terms of the expected savings from this single measure) were not set out by the Review Commission.

This report has argued that no-fault insurance is not the answer to the challenges that ICBC faces during the coming years. The evidence from other jurisdictions, in particular those in the USA and Canada, suggest that no-fault insurance schemes have not offered drivers long-lasting reductions in auto insurance premiums. The potential benefits of no-fault systems lie in their ability to offer one-time reductions in insurance costs by effectively offering less coverage. This is achieved through reduced benefits for innocent victims, or in the form of deductibles (either verbal or in monetary terms) on pain and suffering awards, or in limiting access to the courts. In turn, in theory at least, some of these accrued savings can then be redistributed to increase the benefits that are paid

out to the at-fault drivers, and to the benefits that are paid to persons involved in accidents.

It is widely acknowledged that the problem of increasing insurance costs stems from drivers causing too many accidents. As such, this situation is best counteracted by a combination of road safety improvement measures and rigorous enforcement of the rules of the road. With regard to the situation in British Columbia, a number of opportunities have been highlighted by KPMG and the Automobile Insurance Review Team as to how ICBC could effectively save significant sums of money, while at the same time retaining the fundamental advantages of a tort-based system. These issues need to be addressed at the earliest opportunity before recourse is taken to introduce a system of insurance that restricts the freedom of innocent accident victims to obtain adequate compensation for their injuries.

## Potential policy changes

1. ICBC could divide its \$4.5 billion reserve fund into four or five equal segments and hire a number of local investment management funds to look after the portfolio. A 1 percent increase in investment performance would have meant an extra \$40 million or so in additional investment income in 1995.
2. ICBC should recognize the risk associated with age and gender in setting premiums.

<sup>19</sup> A range of accident prevention measures, theft and fraud reduction, and service enhancement changes were identified by the Automobile Insurance Review Team to have the capacity to save \$100 million in 1998. This does not include significant savings (as identified by KPMG) that could be gained by adopting Mediation and Alternate dispute resolution procedures.

## Potential changes in the insurance product

### *Pain and suffering awards*

Appendix Table 2 provides the basis for estimating the potential savings to ICBC of introducing a deductible for payments made to alleviate pain and suffering. The estimated savings to ICBC after the introduction of a \$10,000 deductible for pain and suffering is \$202 million. Savings from deductibles of \$5,000 and \$15,000 are estimated to save ICBC \$131 million and \$235 million per year respectively.

### *Charge the at-fault driver a one-time sum of up to \$500 towards compensation to innocent party*

ICBC may consider charging the at-fault driver a single "fine" of perhaps \$500 to offset costs incurred. This potential measure has the advantage of reinforcing the need for careful driving habits, is easy to implement, and could save ICBC a significant sum of money.

**Table 6: Potential Savings Resulting from Charging a Levy to At-Fault Drivers**

Number of Property/ Collision Claims Paid Out by ICBC in 1995	Estimated Claims from Accidents which Involve an Assessment of Fault	Amount of Fine (\$)	Estimated Savings (\$ million)
226,009	101,705	500	50.85
226,009	101,705	250	25.43

Assumptions: The number of property damage collisions is used as a proxy for the total number of accidents in B.C. in 1995 for which claims were incurred. It is assumed that 90 percent of all accidents involve one party who is assessed at fault.

Source: Author's calculations using ICBC claims data for 1995.

**Appendix Table 1: Selected ICBC Financial Data 1975 to 1995**

	Number of Policies Written	Total ICBC Costs (\$000s)	CPI for Vancouver (1986 = 100)	Average ICBC Costs Per Policy	Average ICBC Costs Per Policy Adjusted for Inflation	% Increase in Average Total Costs per Policy Net of Inflation	Under- writing Loss (\$000s)	Investment Income (\$000s)	Total Claims Incurred (\$000s)	Net Income (\$000s)	Average Premium (\$)
1975	1,450,000	249,023	45.40	171.74	378.28			3,800	256,000	(34,179)	124
1976	1,504,000	327,603	49.70	217.82	438.27	15.86		30,200	216,000	(144,181)	236
1977	1,560,000	313,200	53.30	200.77	376.68	-14.05		35,200	297,000	71,800	216
1978	1,622,000	380,980	57.40	234.88	409.20	8.63		43,500	313,000	6,100	226
1979	1,671,000	430,715	61.90	257.76	416.41	1.76		58,200	338,000	3,800	226
1980	1,805,000	555,781	67.70	307.91	454.82	9.22		70,700	450,000	(68,000)	232
1981	1,873,000	664,274	77.30	354.66	458.81	0.88		102,600	553,000	600	300
1982	1,821,000	766,457	85.50	420.90	492.28	7.30	(108,891)	108,536	609,000	3,200	361
1983	1,833,000	791,320	90.20	431.71	478.61	-2.78	(96,230)	100,616	625,674	4,300	379
1984	1,834,000	833,722	93.80	454.59	484.64	1.26	(118,468)	128,032	660,353	9,564	376
1985	1,842,000	827,000	96.80	448.97	463.81	-4.30	(84,823)	158,385	653,883	73,562	387
1986	1,917,000	928,000	100.00	484.09	484.09	4.37	(170,121)	171,241	742,139	1,120	376
1987	1,981,000	1,058,000	103.10	534.07	518.02	7.01	(236,998)	179,205	850,546	(57,793)	411
1988	2,036,000	1,221,000	106.80	599.71	561.52	8.40	(186,987)	213,140	953,798	26,153	516
1989	2,095,000	1,434,000	111.50	684.49	613.89	9.33	(188,398)	278,493	1,126,456	90,095	580
1990	2,170,000	1,727,842	117.60	796.24	677.08	10.29	(314,747)	331,937	1,362,791	17,190	631
1991	2,223,000	2,030,981	123.70	913.62	738.58	9.08	(496,222)	315,824	1,617,483	(98,398)	669
1992	2,276,000	2,168,512	127.40	952.77	747.86	1.26	(392,836)	243,627	1,704,436	(64,186)	785
1993	2,292,000	2,132,305	132.00	930.33	704.79	-5.76	(90,527)	246,594	1,641,572	156,067	852
1994	2,343,000	2,287,544	134.70	976.33	724.82	2.84	(123,891)	264,781	1,783,731	140,890	893
1995	2,390,000	2,506,029	138.00	1048.55	759.82	4.83	(252,868)	315,122	1,967,308	62,254	917
<b>ICBC Total Costs Per Policy Written</b> Average Annual Compounded % Rate of Growth 1975 to 1995 (net of inflation): 3.55 Average Annual Compounded % Rate of Growth 1991 to 1995 (net of inflation): 0.71 Average Annual Compounded % Rate of Growth 1975 to 1986 (net of inflation): 2.27 Average Annual Compounded % Rate of Growth 1986 to 1991 (net of inflation): 8.82  Source: ICBC Annual Reports and B.C. Stats.											

**Appendix Table 2: Potential Savings from a Deductible on Pain and Suffering Awards of \$10,000**

Size of Loss (Column A)	Coverages Closed (Column B)	Loss Payments (Column C)	Average Loss (mid point for the size of loss) (Column D)	Estimated Individual Payment for Pain & Suffering (Column E)	Total Estimated Payments for Pain & Suffering (Column F)	Estimated Payments With a Deductible of \$10,000 (for Individual) (Column G)	Estimated Total Payments with Deductible of \$10,000 (Column H)
				Column D x 53%	Column E x B	Column E-10,000	Column G x B
1-499	1,265	272,527	250	133	148,638	0	0
500-999	1,639	1,041,182	750	398	577,748	0	0
1,000-2499	5,013	8,002,097	1,750	928	4,123,193	0	0
2,500-4,999	6,652	23,413,067	3,750	1,988	11,724,150	0	0
5,000-9999	8,604	60,104,120	7,500	3,975	30,329,100	0	0
10,000- 24,999	9,218	144,786,525	17,500	9,275	75,818,050	0	0
25,000- 49,999	3,627	125,291,733	37,500	19,875	63,295,875	9,875	35,816,625
50,000- 99,999	1,636	111,814,389	75,000	39,750	57,669,000	29,750	48,671,000
100,000- 199,999	710	97,136,972	150,000	79,500	43,554,950	69,500	49,345,000
200,000- 499,999	349	100,609,668	350,000	185,500	57,410,500	175,500	61,249,500
500,000- 999,999	84	58,264,338	750,000	250,000	21,000,000	240,000	20,160,000
Greater than \$1 Million	32	65,609,211	1,250,000	250,000	8,000,000	240,000	7,680,000
Total	38,829	796,345,829			425,689,498		222,922,125

Source: ICBC; and calculations by author.

Note: Numbers may not add up due to rounding.

Key Assumptions:

1. Payments for pain and suffering are estimated as being 53 percent of the total payments for bodily injuries. This assumption is based on information contained in the KPMG report (Volume II, page VI-10).
2. The total estimated payments for pain and suffering were stated as being \$454 million in 1995 in Volume II of the KPMG report. To simplify this illustration, pain and suffering payments have been set at \$425.7 million in 1995.

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