
**ACCIDENT COMPENSATION IN
NEW ZEALAND
A PROPOSAL FOR REFORM**

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SUMMARY

- ❖ The performance of the existing Accident Compensation Scheme can be assessed in terms of the efficiency and fairness with which it pursues the two related objectives of any accident insurance system: the protection of income against the risk of accidents; and the deterrence of accidents.

- ❖ With current practice, there is little empirical data available with which to assess the quality of the Accident Compensation Corporation's operation of the scheme. This is in part the result of a preoccupation with administrative costs, at the expense of investment in information about the wider social costs of accidents, and the development of schemes for reducing them.

- ❖ On the other hand, it is possible to make an assessment of the Corporation's incentives and capacity to perform by considering the legislation on which its activities are based, and the rules that it operates by. In this regard, there are two main concerns.

First, the protection of the Corporation from competition by private sector accident insurance companies weakens its incentives to act in an efficient way to differentiate risk categories and develop insurance policies that promote accident prevention and control treatment costs.

Secondly, the way in which the Corporation's objectives are specified, and the mechanisms for monitoring its performance, both help to reduce the capacity of ACC managers to perform efficiently, and provide only weak mechanisms for making them accountable for their performance.

As a result, the present system can be expected to perform considerably worse, in terms of both efficiency and equity, than a competitive, private-sector accident insurance system.

- ❖ A number of concerns have typically been raised about relying solely on voluntary insurance arrangements as a means of handling the risks associated with accidents. One is that low-income, high-risk people will be unable to afford insurance, and so risk being denied access to treatment and income support if they suffer an injury. Another is that victims of occupational diseases with long latency periods may slip through the net of the insurance system. A third is that insurance company failure may leave vulnerable individuals exposed.

None of these concerns constitutes a case against voluntary arrangements for the great majority of individuals and eventualities. However, they do indicate a need to consider, in particular, means of subsidising access to market insurance by low-income individuals, and means of catering for the special problems created by slow-developing occupational diseases.

- ❖ Insurance schemes do not operate in a vacuum. For example, the efficiency with which the risk and costs of injuries are dealt with in the workplace depends on the quality of relationships between employers and workers, and the scope that they have for finding sensible, adaptable solutions to workplace issues. In this sense, labour market reforms aimed at greater choice and flexibility in employment relationships would complement reforms to the accident insurance system.

Nor is insurance the only way of handling accident risks, and in particular of encouraging people to take sensible measures to reduce the risk and severity of accidents. In particular, access to tort remedies may in some cases be a useful supplement to insurance. The absence of tort remedies in the case of motor vehicle accidents, for example, has been found to weaken quite considerably the incentive to drive carefully. A reconsideration of the potential role of tort remedies should therefore accompany reform of the Accident Compensation Scheme.

- ❖ The deficiencies of the present Accident Compensation Scheme could to some extent be addressed by restructuring it in accordance with the principles of the state-owned enterprises legislation, and opening the accident insurance market to competition. For this to occur, an efficient means would need to be found for funding its existing liabilities, and rationalising payments for services currently provided by the public health system.

"Corporatisation" of the ACC should not, however, be regarded as an end point. Commercial organisations that remain in state ownership are not constrained by the capital market pressures - ranging from the threat of takeover to the threat of bankruptcy - that are so important in promoting efficient behaviour on the part of private sector companies. Further, they are subject to a continuing threat of manipulation for political ends. For these reasons, a further move, to privatisation, would be desirable.

A programme for the reform of the Accident Compensation Scheme, working through financial restructuring and "corporatisation" to privatisation, should ideally be pursued not in isolation, but in the broader context of labour market and health sector reform.

SECTION 1: INTRODUCTION

Between 1975 and 1989, the expenditure of the Accident Compensation Corporation (ACC) increased 25.8-fold in nominal terms. Its expenditure last year amounted to \$877 million. The level of resources consumed by the Accident Compensation Scheme alone suggests the importance of reviewing and debating its objectives and effectiveness.

The way in which the scheme affects employment costs and safety incentives, and the way in which it interacts with the public health system - itself in need of substantial reform - indicate the importance of focusing not only on the scheme's costs, but, more fundamentally, on the ideas and principles that underpin it. The aim of this paper, therefore, is to discuss the need for, and appropriate direction of, reform of our accident compensation system by returning to very basic questions about how risks to safety can best be handled, and the place of accident insurance in this schema.

In thinking about the sorts of practices and institutions that will help people to handle the risks associated with accidents, there are two basic concerns. The first is the provision of an "efficient" level of protection against the risk of income loss and the cost of treatment that occur with accidents. The second is the provision of incentives to take a reasonable amount of care in order to reduce the likelihood and severity of accidents. Also important are incentives to avoid blow-out in the costs of treating injuries.

The first of these tasks is the main function of insurance schemes. Insurance effectively enables individuals to shift income between different states of the world - from states in which they are healthy and have access to more or less regular income, to states in which they are in need of medical treatment and their access to income is less secure. Insurance schemes can also play an important role in encouraging people to make economically sensible decisions about what activities to engage in, and how much care to take, by the way in which they differentiate between customers, or build incentives for care into insurance contracts.

Insurance need not be purchased on the market. Instead, there are many risks - typically risks that have a high probability of occurring, but which impose relatively small costs - for which it is sensible to "self-insure". Thus in a well-functioning health system, for example, we might expect most people to pay for visits to their GP out of savings, and only purchase

insurance against relatively small but potentially very costly risks, such as the need for major surgery.

Looking more widely, a degree of income protection may be built into the higher wages that typically go with particularly risky jobs. And, particularly in the case of accidents involving people who are strangers to each other (such as most motor vehicle accidents), the incentive to take care may be enhanced by the availability of tort remedies through the courts. (This last option has, of course, been removed in New Zealand, where the Accident Compensation Scheme is a "no-fault" scheme.) Alternatively, "insurance" against some or all risks may effectively be provided by the state, as is the case with New Zealand's publicly funded health service.

Accident risks differ widely in their likelihood and their severity, and people, too, differ in their physical and economic capacity to deal with the risks that they confront. In order to operate efficiently and fairly, a system of accident insurance will have to be sufficiently flexible and responsive to accommodate these differences - meeting different needs and preferences for income protection, and tailoring incentives for care to different people and different circumstances. At the same time, given that handling accident risks is not costless, it is important that an efficient balance be struck between insurance purchased on the market and the other means of income protection and accident deterrence described above.

In the following Section, we discuss the available data on the performance of the present Accident Compensation Scheme, and offer a more general perspective on the kinds of incentives that it furnishes to reduce the risk of accidents and the costs of treating injuries.

In Section 3, some of the arrangements that are likely to arise in insurance markets are sketched. Our general argument is that efficiency and fairness in income protection and accident deterrence are most likely to be promoted by private insurance arrangements, based on individual choice.

Section 4 considers some of the problems that may be associated with relying on private sector arrangements for accident insurance, and ways in which these may be resolved. The issues considered include the affordability of insurance for low-income individuals and families; the ability to deal with occupational diseases with long latency periods, and prudential concerns.

In Section 5 we comment briefly on the relationship between accident insurance reform and reform in two closely related areas: the labour market and access to tort remedies.

Finally, Section 6 proposes a process for the reform of accident insurance arrangements in New Zealand, and discusses the way in which such a process might be integrated with more general health sector reforms.

SECTION 2: THE PERFORMANCE OF THE ACCIDENT COMPENSATION SCHEME

There are two ways in which the performance of the present Accident Compensation Scheme might be assessed. The first is to look at empirical data on the nature of and trends in claims generated by the scheme. The second is to consider the rules by which the scheme operates, and the ways in which these affect both the ability and the incentives of scheme managers to develop efficient and fair insurance arrangements.

After considerable research, we have come to the conclusion that the data available on the outcomes of the present scheme are so limited that meaningful empirical analysis of the ACC's performance is simply not possible. This section begins by sketching those findings. However, an analysis of the structure imposed on the ACC and the rules by which it operates does enable some important conclusions to be drawn about the incentives that it faces and its capacity to perform efficiently and fairly. The second part of this section discusses the implications of this kind of analysis, using the state-owned enterprise model as a reference point.

2.1 Data on the Operation of the Accident Compensation Scheme

For an insurance scheme to operate efficiently, it is necessary to have accurate statistical information about the people who are being insured and the nature of claims that are being made. For example, access to data on the duration of claims will enable an insurance company to detect changes in the period for which individuals remain on compensation. The early detection of any such change - and therefore the cost of cover - will enable the company to take or encourage actions that will keep its expected revenues and outgoings in balance, for example, by adjusting its rates, revising its rehabilitation programmes, or encouraging clients to install additional safety equipment.

One way of assessing the performance of the ACC, therefore, would be to look at trends in a range of claim characteristics, and the responses of the Corporation to these trends. In this context, data has been sought on:

- (1) the duration of claims broken down by the type of accident;
- (2) annual expenditure broken down by the year in which each claim was lodged;

- (3) the number of claims broken down by the year in which they were lodged, and
- (4) the duration of all claims in terms of weeks or months.

In each case, the data that was available was severely limited:

- (1) It appears that the ACC does not produce data on duration of claims by accident type in any regular or systematic fashion. The data that were available had to be generated by a special computer programme, dealt only with the most recent year and represented only 40 percent of total claims.
- (2) Data on annual expenditure for each year in which claims were lodged were published up to 1987/88, and indicated that the period for which claimants remained on benefit was increasing. These data have apparently not been produced since 1987/88.
- (3) A classification of claims by year of initial lodgement was available only for the year ending March 1989. The absence of data for earlier years precludes any analysis of this aspect of claim duration.
- (4) No duration data were available on the length of claims by day, week, or month, although we gather that raw data do exist from which this information could be produced.

These examples suggest that the ACC makes little use of the detailed information that it gathers about each claim in order to improve on its performance in rate-setting or accident prevention and rehabilitation. This is in marked contrast with the practices that can be observed in competitive accident insurance markets overseas. In this regard, Professor Patricia Danzon, a prominent health economist from the United States, has commented that the ACC's data base:

"is not designed to collect the detailed information necessary to implement an effective loss-control and risk management program. Yet the evidence that private insurers operating in competitive insurance markets elect to keep such data suggests that it is a cost-effective investment. By contrast, the ACC keeps detailed data on body part involved in the injury and other items, which have no obvious use in designing loss-control programs and are not routinely kept by insurers operating in competitive insurance markets. This suggests that one of the costs of reliance on the state monopoly insurer rather than competitive insurers is the loss of incentives to make cost-justified data-collection decisions."¹

¹ Danzon, P.M. (1990), "The New Zealand Accident Compensation Scheme: Lessons on No-Fault Compensation for Medical and Other Injuries", draft paper, March, p. 34.

In particular, there has been an emphasis on gathering the kind of data that would assist in minimising administrative costs or overheads, rather than the wider social costs of injuries that could have been avoided if more emphasis had been placed on developing means of reducing the risk and costs of injury. This may lead to unnecessarily expensive and enduring claims.

2.2 Institutional Constraints and the Performance of the ACC

How well any organisation performs is to an important extent a function of the legislative and regulatory environment in which it operates. Both the ability of its executives to use resources efficiently to meet the needs and preferences of its clients, and their incentives to do so, are shaped by the rules that they must operate by, and the political and market pressures that they face. It was recognition of these points that formed the basis for the state-owned enterprise (SOE) reform process. State-owned enterprises were reorientated to operate according to commercial principles, and their regulatory environments were changed to expose them, wherever possible, to competition from the private sector.

In the case of the ACC, a number of facts about its structure, the rules by which it operates and the market position conferred on it suggest that its incentives to perform efficiently are greatly muted. There are two general problems here. The first relates to the virtual monopoly on accident insurance conferred on the ACC by statute. The second relates to state ownership of the ACC and its lack of commercial orientation. We will discuss each of these problems, and its manifestations, in turn.

2.2.1 Competition and Efficiency

The Accident Compensation Act grants the ACC the right to act as a monopoly insurer for the work, non-work and motor vehicle insurance mandated by the Act. In other words, the Corporation is protected both from actual competition by other insurers and from the threat that, should it fail to use its mandate in the interest of its clients, other companies might come into the market. This has significant implications for its incentives to use the resources available to it in an efficient way and to operate policies that are equitable, in the sense of allocating the costs of insurance according to the burdens that different groups of clients place on the system. (In this sense, equity and efficiency will go hand-in-hand in the design and pricing of insurance.)

There are three main ways in which exposure to competition increases any organisation's incentives to perform efficiently. First, it creates an incentive to economise on the resources used to produce the quantity and quality of goods or services that consumers demand. This means that the greatest possible amount of resources is left for the production of other goods and services - that, overall, consumers can get the most and best for their money.

Secondly, competition encourages firms to search for new goods or services, new production or management methods and new ways of marketing, so as to satisfy the preferences of consumers better. Companies that fail to innovate or that make poor investment decisions tend to be punished, in the long run, through the loss of customers.

Thirdly, competition reduces the scope of any organisation to price its goods or services in a way which exploits its customers - to charge significantly more than the cost of producing the last unit of that good or service (the "marginal cost"). Excess profits entice other firms into the market. An ability, in the absence of competition or the threat of competition, to sustain prices well above marginal cost will effectively reduce the purchasing power and welfare of the community at large. Similarly, efficiency can be eroded where one group of consumers is charged prices which significantly exceed the costs of meeting their requirements, in order to subsidise other groups of consumers - where significant "cross-subsidisation" exists.

Because the ACC is given a statutory monopoly it is likely to have considerably less incentive than an insurance company operating in a competitive market to design and price insurance policies efficiently; for example, to make decisions about the efficient level of differentiation of groups of customers, to design policies that provide the desired level of income protection while reducing the risk that this will induce clients to take less care than is appropriate (the "moral hazard" problem), and to take action to control the costs of treatment for such accidents as do occur, and the duration of rehabilitation. Whereas in the case of the ACC a primary concern is to minimise administrative costs, companies obliged to compete for clients will have incentives to minimise the overall costs of delivering the amount and quality of income protection desired by their clients - and thus to take into account the wider social costs of accidents.

The poverty of data collection and data analysis by the ACC, noted above, is one manifestation of the weaknesses associated with the Corporation's monopoly status. Another is its rate-setting procedure.

Companies in competitive accident insurance markets typically use "experience rating", which involves setting premia in accordance with a client's observed past performance. In contrast, ACC levies for earners' accident insurance comprise a flat component to cover non-work accidents and a variable rate reflecting the cost experience in each of 24 levy classes. The absence of experience rating (and the fact that since 1985 the ACC has not exercised its right to award bonuses or charge penalties to companies whose performance differs considerably from the average for their industry) means that for the great majority of employers there is no strong link between their accident record and the levy that they face. This must reduce their incentives to invest in measures that would enhance safety, at least as a means of reducing their insurance costs.

The failure to experience rate is also likely to result in cross-subsidies, both between companies in an industry and between industries. In the first case, companies that have good safety records and seek actively to reduce workplace accidents will end up subsidising less safety-conscious companies with more dangerous work practices and environments. This is not only inefficient, in that socially costly activities are encouraged at the expense of less costly ones, but eminently unfair. In the second case, cross-subsidies between industries mean that prices mislead consumers about the real cost to society of producing those goods and services including the costs of accidents. Consumers will be unduly encouraged to buy goods that impose a high cost in terms of accidents to workers.

The cost of distinguishing between companies or individuals with different risk characteristics means that some degree of cross-subsidisation is always going to be efficient. In this sense, a competitive insurance market, however efficient, is not likely to be free of cross-subsidisation. On the other hand, the absence of competition is likely to lead to a degree of cross-subsidisation which is socially excessive.

The use of only 24 industrial levy classifications (reduced from 103 in 1989) is likely to indicate an inappropriately high degree of cross-subsidisation. While it is not possible to make precise judgments about how many classifications would be adopted were the accident insurance market open to competition, some indication of the extent of differentiation that could be efficient is given by the example of the United States, where the standard classification system involves 600 risk classes, and 300-400 separate classes are used in most

states. A recent sample of 36 states found that the 45 most common classifications accounted for only 62 percent of workers' compensation premia².

At a more anecdotal level, the reduction in risk categories in New Zealand does seem to have created some worrying anomalies. For example, the levy for firefighters has been reduced from \$6.00 to \$1.30 per \$100 of leviabale income, and that for aerial top-dressers from \$11.00 to \$1.70, although there is no indication that the accident costs of these groups have significantly decreased relative to other groups. At the other end of the scale, the absorption of the previous clerical/management class into various industry classes is likely to lead to significant cross-subsidisation of blue-collar activities by white-collar activities.

2.2.2 *Ownership and Incentives*

Government ownership of the ACC brings with it a number of problems that, while not absent in private sector accident and insurance organisations, can be resolved in the latter case by various market and contractual means. These revolve around the setting of objectives for the organisation, and then the monitoring of its activities, as a means to achieving desired performance in terms of these objectives.

To some extent, such problems can be reduced by an approach like that adopted in the state-owned enterprise legislation, whereby government-owned organisations engaged in trading activities were set unambiguously commercial objectives, and various mechanisms were established for assessing their performance. These include requirements for annual reports analogous to those produced by private sector companies, the establishment of Boards of Directors, and monitoring by the Treasury. (However, as the Business Roundtable has argued elsewhere³, significant problems remain, hingeing on the absence of a market for shares in these organisations and the difficulty of maintaining an arm's-length relationship between shareholder Ministers and the corporations which they oversee.)

The Accident Compensation Corporation has not been subjected to such reforms, and suffers a number of problems comparable to those which characterised the SOEs prior to corporatisation. We will sketch these problems only briefly.

² Krueger, A.B. and Burton, J.F. (1989), "The Employers' Costs of Workers' Compensation Insurance: Magnitudes, Determinants and Public Policy", National Bureau of Economic Research Working Paper # 3029, p. 3.

³ New Zealand Business Roundtable (1988), *State Owned Enterprise Policy: Issues in Ownership and Regulation*, Wellington, New Zealand Business Roundtable.

The Accident Compensation Act states that the purpose of the Act is to promote safety and rehabilitation and to make provision for the compensation of individuals who suffer injury by accident. In contrast to the SOE legislation, it does not state that the ACC is a commercial undertaking, or set it the objective of functioning as a successful business.

The objectives set for the ACC are not necessarily in conflict or inconsistent with the operation of a successful business since an efficient insurance company will typically meet consumers' demands for income protection, encourage an "efficient" amount of accident prevention, and seek to economise on rehabilitation costs. However, this linkage is not encouraged by the way in which the ACC's objectives are specified in the Act, and the Act makes it difficult, given its non-commercial focus, to specify performance targets that are meaningful in this sense. Moreover, the emphasis placed by the ACC on minimising administration costs, rather than total costs, is likely to have led to inadequate attention to the goals of accident prevention and the promotion of rehabilitation.

The Corporation is not subject to formal or structured performance monitoring by any central government agency. Nor does it face any significant information disclosure or target setting requirements that might enable Ministers and their advisors to assess the quality of their performance by commercial standards. Although the ACC does table an annual report in Parliament, this is considerably less informative, in commercial terms, than the annual reports typically prepared by private sector insurance companies. Further, several members of the Corporation's Board of Directors appear to have been appointed less for their commercial expertise than for their ability to represent various sectoral interests. This both reduces their ability to assess the quality of its performance in commercial terms, and increases the risk of conflicts between the pursuit of commercial performance and the interests of Board members.

In addition, the close formal and informal relationship between the ACC's Chairman and Managing Director and the Minister on policy and political matters creates potentially significant conflicts of interest for the Corporation, and means that it is virtually impossible to assess its commercial performance in any meaningful sense. (This is in stark contrast with the situation of the SOEs, for which there is a clear separation of policy and commercial functions, and the establishment of an arm's-length relationship between the Minister and enterprise managers.)

Setting up the ACC on an SOE basis, and opening the accident insurance market to competition, would go some way towards creating clear incentives for the pursuit of efficiency

by its managers. Such a restructuring process could, however, be complicated by the "pay-as-you-go" nature of the scheme. Private sector insurers typically "fully fund" their commitments (which involves maintaining sufficient reserves to meet liabilities arising from expected claims from current and previous policy-holders). In contrast, the ACC is significantly under-funded, with levies being set to generate sufficient income to meet the current year's claims while avoiding sharp fluctuations in levies from year to year. Preliminary analysis suggests that the result is under-funding in the order of \$1-2 billion.

In practice, even with the kind of reforms implemented in the state-owned enterprises, performance comparable to that of privately-owned companies is unlikely. This is both because of the relatively weak capital market constraints faced by companies that lack tradeable shares, for which the risk of bankruptcy is minimal, and for which there may be a perceived government guarantee on debt; and because of the ongoing political risks - for example, the risk of pressures for politically-motivated cross-subsidisation - associated with government ownership.

For these reasons, we consider that while restructuring the ACC along the lines of the SOE legislation, and exposing it to competition, would greatly enhance its ability and incentives to perform efficiently and equitably, "corporatisation" should not be seen as an end-point.

SECTION 3: ARRANGEMENTS UNDER PRIVATE INSURANCE

Section 2 set out a number of reasons why the efficiency and equity of services provided by the Accident Compensation Corporation are likely to fall short of what could be achieved were accident insurance the prerogative of private insurance companies, subject to a full range of market disciplines. It argued that the ACC's incentives for risk reduction and minimisation of overall social costs - rather than simply administrative costs - were weak relative to those that could be expected in a market in which accident insurance companies were obliged to compete for customers.

Competition, it was argued, would lead to greater efficiency in dealing with differences in risks and consumer preferences, with the incentive problems inherent in the promise that, if an accident occurs, assistance will be available, and with the risk of cost blow-out in treatment and rehabilitation. There would still be incentive problems and information problems in a competitive, private-sector insurance market, but there would be strong incentives to deal with these relatively efficiently. For example, the incentives of clients to take action to reduce the risk of injury, despite the fact that they have insurance, may be encouraged by the use of deductibles, co-insurance, or the establishment of certain pre-requisites for insurance pay-outs (such as wearing a seat-belt in the case of motor vehicle accidents, or the provision of specified safety equipment at a workplace).

In this section, we focus on the sorts of insurance arrangements that would evolve in a system relying primarily on voluntary insurance arrangements. In doing so, we are aided by the fact that most other countries rely on private insurance, although the extent to which insurance regimes are regulated varies considerably. Section 4 discusses some concerns that are often raised about such arrangements.

Because purchasing insurance is only one way of dealing with the costs of an accident and loss of income, it might be expected that individuals would choose different mixes of market insurance, saving and preventative efforts. For example, a person in a relatively safe occupation might decide to save against the risk of an occupational injury, but take out market insurance for road accidents.

We might also expect different kinds of insurance which have common characteristics to be bundled together. For example, health insurance - even supplementary insurance of the kind

currently available in New Zealand - might usefully be packaged with accident insurance, particularly given that there is in some cases a fine dividing line between sickness and injury.

Similarly, accident insurance could, like health insurance, be purchased on an individual, family or workplace basis. Where a number of individuals face similar risks, there will be cost advantages in group insurance⁴. For high-risk sports activities, for example, sports clubs may be a sensible vehicle through which to purchase insurance. In the case of many workplaces, the risk to any individual worker may be best approximated by the average risk of all workers.

In the latter case, whether the employer or the workers collectively are better placed to negotiate a good deal will depend on their relative ability to reduce risk. If safety is largely a product of the quality of machinery or the work environment, and thus largely at the discretion of the employer, there may be savings in administrative costs if the employer also takes responsibility for insurance. If the risk of accidents is, by contrast, largely in the hands of workers, there may be some cost advantages in placing the responsibility for purchasing insurance on workers, for example through a union⁵.

Evidence from the United States suggests that a relatively competitive market for accident insurance is likely to yield considerable variety in insurance contracts. Disability policies, covering medical costs and income losses for both sickness and accidents, are widely available. The waiting period on such policies can be as little as one week (in exchange for a high premium), or as long as a year (in exchange for a low premium). The period over which benefits will be paid for an accident resulting in total disability ranges from two years to the full period to retirement age, or may be for life if the accident occurs before some specified age (usually 55 to 60). While the size of benefits varies, there is typically an upper floor of 85 percent of earnings for low-income earners, and 65 percent for high-income earners. There is typically also provision for rehabilitation benefits, and for lump-sum payments for the loss of an organ or a limb. While the details of packages offered might be expected to differ in New Zealand, a similar variety and flexibility in the terms of insurance contracts would be likely were a competitive insurance market allowed to develop here.

⁴ In the case of health insurance in the United States, for example, group insurance on a workplace or enterprise basis can yield premium advantages averaging around 30 percent.

⁵ Either way, of course, the cost of insurance will ultimately fall on workers; if the employer purchases the insurance, this will simply occur through lower take-home pay (see, for example, Krueger and Burton, cited in note 2 above, at p. 17).

SECTION 4: PROBLEMS AND POLICY ISSUES

A number of concerns have been raised about the wisdom of relying on voluntary arrangements - including the voluntary purchase of market insurance - for handling the risks associated with accidents. In this section, we consider the most important of these concerns, and ways in which they might be resolved.

4.1 "Equity" and Affordability

A commonly voiced concern about relying on a competitive insurance market is that access to insurance will be restricted in "inequitable" ways. In particular, there is a concern that those with low incomes, adverse risk characteristics or both will be unable to purchase insurance, and therefore will lack the ability to support themselves and bear the costs of treatment if they suffer, in this case, an accident.

The problem here is not that markets "fail" for such individuals, but rather that they simply cannot afford the premia that it would be efficient to charge them and that are equitable in the sense of avoiding excessive cross-subsidisation from low-risk or high-income individuals. In this sense, concerns that relying on market insurance will mean that "equity" is sacrificed are not concerns about unfair treatment of some categories of individuals by insurance companies, but rather concerns about the financial ability of some individuals to enter the market in the first place. In other words, they are concerns about the adequacy of some people's incomes. This suggests that the solution is not to constrain the operation of insurance markets, but rather to improve access to them by supplementing the incomes of low-income/high-risk people.

In thinking about how problems of affordability should be countered, the objective should be to ensure that everyone has access to whatever level of cover is decided to be socially desirable, while as far as possible retaining the incentives for accident prevention and cost control that go with market insurance. There should also be a concern to minimise the potential for any support scheme to be manipulated in the interests of relatively well-off groups - to avoid, for example, the kind of middle-class capture problems observed in the health system in New Zealand. This means that precise definitions of classes eligible for support, and simple criteria for deciding who belongs to these classes, are to be preferred to universal, loosely-defined benefits.

One way of ensuring access would be to provide free accident treatment to those who could not afford insurance cover - to provide a safety net of basic treatment and rehabilitation services. However, this would be likely to create considerable "free-rider" problems; the incentives for those who could actually afford to purchase insurance would be seriously undermined. One possible solution to this problem, which would also be viable as a means of assuring access to more general health care⁶, would be to make purchasing some basic level of accident insurance compulsory, and at the same time target with subsidies individuals or families who could not afford this level of cover. (We would expect the required level of cover to be well below that presently mandated under the earners' part of the Accident Compensation Scheme.) Subsidies could take the form of tax credits (administered through the Inland Revenue Department) or vouchers for the purchase of accident (or accident and health) insurance.

This approach would have some costs vis-a-vis simply relying on voluntary insurance, in that some people - particularly low-income, low-risk people - would be obliged to spend more on accident insurance than they would given complete discretion about how to spend their income, including any untagged subsidies. Others who were forced to insure could more efficiently self-insure, which would give them greater incentives both to avoid accidents and to economise on treatment costs. However, if the required level of cover was minimal - if, for example, it did not exceed the level needed to protect against the risk of catastrophic accidents - the costs of compulsion should be relatively small.

Recent proposals to extend the current incapacity scheme to embrace both health and accident risks would make the compulsory level of insurance cover very high and raise costs substantially. However, the significant differential between benefits under the incapacity scheme and other welfare benefits could be expected to lead to a large amount of "migration" on to the scheme, and pressure to raise other benefits to a level commensurate with incapacity benefits. This would have considerable fiscal costs. Affordability problems would also be aggravated the higher was the mandated minimum for insurance cover.

There must also be a concern that any element of compulsion in insurance would increase the risk of subsequent government interventions to regulate rates and the underwriting of private insurance contracts. If this were to occur, the potential efficiency gains from moving to a private insurance system could be seriously undermined, and administration costs could rise considerably.

⁶ For a broader discussion, see Danzon, P.M. and CS First Boston NZ Ltd. (forthcoming), *Options for Health Care in New Zealand*, Wellington, New Zealand Business Roundtable.

On the other hand, *some* form of safety net is likely to be socially desirable - as a society, we are unlikely to countenance the idea of people not receiving treatment for accidents because they lack insurance cover. A degree of compulsion, linked to targeted subsidies, may be a relatively efficient way of dealing with the risks of free-riding on the publicly-funded safety net, while preserving a lot of the efficiency gains that go with a competitively operating private insurance market. This is all the more important in the context of continuing public provision and funding of the great majority of health services, including accident and emergency services.

The case for compulsory insurance may be reinforced if the accident insurance market is characterised by severe "adverse selection" problems. These arise where it is difficult and costly to assess the riskiness of individual clients or groups of clients so as to tailor insurance policies and premia to the costs that are likely to be imposed on the insurer. As a result, there will either be a high degree of cross-subsidisation of high-risk clients by low-risk clients, or low-risk clients will be driven out of the market altogether. Just how much this is a problem in the area of accident insurance is an empirical matter - for many categories of work and sporting activities identifying high-risk individuals may well be relatively simple. Similarly, the statistical profile of individuals most at risk in motor-vehicle accidents is well-known, indicating that discriminating according to risk may not be difficult. However, to the extent that any significant problems in identifying risk remain, there are some indications that setting a minimum level of compulsory cover and allowing those who want more cover to supplement this amount can help to reduce the resulting adverse selection problems^{7,8}.

Mandating a minimum level of cover raises the question of who should be made responsible for purchasing cover. It may be that in some cases employers will be in a relatively good position to purchase insurance - at a discount - to cover workplace accidents. In other cases,

⁷ See, for example, Dahlby, B.G. (1981), "Adverse Selection and Pareto Improvements through Compulsory Insurance", *Public Choice*, Vol. 37, pp 547-558; and Wilson, C.A. (1977), "A Model of Insurance Markets with Incomplete Information", *Journal of Economic Theory*, Vol. 16, pp 167-207.

⁸ Another argument which is sometimes used to "justify" making some minimum level of insurance cover compulsory is that individuals tend to underestimate the risks that they face, and therefore systematically fail to purchase "enough" insurance. However, the empirical evidence is that on average people *do* get their risk assessments more or less right, and take steps to insure accordingly - in the workplace, this process may be helped along by a union assessing risks on behalf of workers. (See, for example, Viscusi, K. (1983), *Risk by Choice: Regulating Health and Safety in the Workplace*, Cambridge MA, Harvard University Press.)

individuals may be better off arranging their own insurance. We would suggest that the best way to overcome this problem is to assume that the primary responsibility for purchasing insurance rests with the individual, but that individuals should be free to contract with others to purchase insurance on their behalf.

4.2 Problem Risks and Special Funds

Legitimate concerns may be raised about the adequacy of market insurance as a means of financing treatment and providing income in the case of occupational diseases that are poorly understood or have long latency periods, such as asbestosis and silicosis. (In terms of the ability to predict and compensate for such diseases, this problem is, of course, shared by the present system.) The central problem here is the availability of information about the causes of such diseases, if not in general, at least in terms of defining a particular exposure which accounts for the onset of illness.

Because efficient insurance markets are not perfectly informed and economise on the cost of producing information about different kinds of risk, there is an important trade-off between acquiring costly information about risks like slow-developing occupational diseases and minimising the overall costs of insurance. In open insurance markets, the result is a combination of some reliance on cross-subsidisation and gaps in insurance cover for some, particularly costly, risks. There is nothing categorically inefficient about this. Occupational diseases with long latency periods may fall into such gaps, for example because of the cost of providing work-related accident insurance susceptible to claims 10, 20 or 30 years after a worker has left a particular job. If this is the case, forcing coverage would lead to an inefficiently high degree of cross-subsidisation, or excessively costly investment in information about the risk of slow-developing diseases.

This suggests that the appropriate solutions may lie outside the market insurance system. Self-insurance (i.e., saving) against such occurrences is one possibility, particularly if it is not so much that the cause of the illness (for example, exposure to asbestos) is not understood, as that pinning responsibility to a particular employer or period of employment is difficult; in such cases the risk of disease may be to some extent compensated for by wage premia. A second, complementary, option is reliance on some form of social welfare safety net for both income maintenance and treatment. A third is the creation of a "special fund", access to which would be triggered by the passage of a certain period of time between employment and the onset of an occupational disease. Each of these approaches has its deficiencies, whether in terms of coverage or in terms of the incentives they create, or both. These should be

considered in deciding the extent and nature of government intervention that might be appropriate to deal with such diseases.

4.3 Prudential Issues

Insurance companies, like banks and other financial institutions, effectively operate as financial intermediaries, trading money now for money at some future time or contingency. In the case of banks, some form of prudential regulation is typically proposed as a means of minimising the risk of bank runs brought on by a loss of confidence in a single institution. In New Zealand (at least until recently), a relatively light-handed approach has been adopted for the prudential regulation of banks. Termed "failure management", this involves the Reserve Bank monitoring banks with the idea of averting failure before it occurs and ensuring an orderly exit in the event of failure rather than relying, for example, on substantial regulation of banks' lending or reserve management practices. The onus is placed on the board and management of financial institutions to conduct their business in a prudentially sound manner. The concern of the authorities is with the functioning of the financial system as a whole.

In the case of the insurance industry, where the "withdrawal" of funds from an insurance company is contingent on certain pre-specified occurrences, such as accidents, the risk of "runs" would seem to be minimal, and the need for prudential regulation would therefore also seem to be negligible.

There is a separate (though related) set of questions about whether insurance companies should be "allowed" to fail, regardless of the wisdom of their practices, given the reliance that people place on them, and the fact that the costs of failure - in terms of suspended payouts - could fall on people who were (by reason, say, of just having sustained an injury) in a particularly vulnerable state.

In this context, however, it should be remembered that company failure is a normal feature of healthy markets; in fact, we rely on the possibility of failure as an ultimate means of pressuring companies to serve the interests of consumers. Many of the companies that fail produce goods and services "necessary" to the survival, or at least well-being, of their clients: food-producers fail; so too do construction companies and clothing companies. In these markets, the availability of alternative suppliers protects consumers from starvation and exposure. In insurance markets, too, there is the possibility of switching policies between companies - even if this is a little more costly to achieve than switching brands of canned

food. (On the other hand, the fact that it is more costly to switch will increase the incentive to use an insurance company with a good reputation in the first place.)

While this does not solve the immediate problem of people who actually have claims lodged, and have yet to receive payment, when an insurer collapses, it may be argued that direct, tax-funded transfers to such people would be preferable to extensive regulation or the active prevention of failures⁹. Another option is the maintenance of some form of trust fund to cater for such occurrences. At present, insurance companies in New Zealand are subject to the Insurance Companies' Deposits Act, which requires them to place a deposit of \$500,000 each with the Public Trustee. The resulting deposit fund, which totalled \$50 million in September 1986, is available to meet the financial obligations of a failed insurer in the general insurance field. There have been some suggestions that the deposit requirement for this fund should be increased. We are not convinced that this would be desirable. Moreover, given the existence of voluntary trust funds in other areas of financial intermediation, it is possible that an effective insurance industry trust fund could be maintained without recourse to legislation.

⁹ This would not, of course, be without incentive problems, to the extent that access to welfare benefits would somewhat reduce the incentive to search out a reliable insurance company before purchasing a policy.

SECTION 5: THE CASE FOR COMPLEMENTARY REFORMS

In practice, the reforms that are appropriate in the accident insurance system, and the benefits that might be expected to flow from such reforms, cannot be understood or assessed outside the context of the broader markets and legal regimes within which competitive insurance companies would operate. In this section, we discuss two of the most significant areas in which separate reform would enhance the efficiency with which accident risks could be handled. These are the labour market and access to tort in some accident cases.

5.1 Labour Market Reform and Risk-Handling in the Workplace

Workplace risks are not homogeneous, and the capacity of employers and employees to prevent injury or minimise its consequences varies from workplace to workplace. So, too, do the best means of handling safety issues; sometimes accidents can be simply and cheaply reduced by adopting straightforward work rules, or installing guards on machinery; sometimes there is little that can be done physically to reduce the risk of accidents. Sometimes employers will be in the best position to promote safety; sometimes this will be more firmly in the hands of employees. As a result, reliance on and the cost of insurance will differ, as will the parties best placed to purchase insurance. Wage premia may also be observed where jobs are particularly risky. All of these elements might rationally be considered and weighed up explicitly or implicitly when employers and employees sort out their general employment contracts with each other.

The rules which surround the representation of employees in bargaining with employers and the actual negotiation of wages and work conditions will have a profound effect on the ability of workers, individually or at the workplace level, to deal with workplace accident risks in a harmonious and efficient way. These rules include not only the requirements imposed by the Accident Compensation Scheme, but also occupational safety and health regulations and labour market legislation, notably the Labour Relations Act. As the Business Roundtable has argued elsewhere¹⁰, the fact that the present labour relations legislation militates against negotiation at an individual, workplace or enterprise level makes it difficult for employment contracts - under the terminology of the present Act, "awards" and "agreements" - to accommodate the variations that might be desirable in the handling of

¹⁰ New Zealand Business Roundtable (1988), *Regulating for Occupational Safety and Health*, Wellington, New Zealand Business Roundtable.

accident risks across workplaces. A substantial benefit of significant labour market reform along the lines of freely negotiated employment contracts would therefore be greater flexibility and efficiency in handling workplace risks - effectively, more safety could be bought for no increase in costs.

5.2 The Case for Rethinking the "No-Fault" Regime for Accidents

One of the reasons behind the introduction of the current Accident Compensation Scheme was dissatisfaction with the effectiveness and fairness of the previous system, which combined reliance on the social security system and public health provision, workers' compensation legislation based on turn-of-the-century British models, and compulsory, unlimited liability insurance for work and motor vehicle accidents. Within this framework, the parameters of insurance arrangements, including who was eligible for benefits and the benefits that would be paid, were determined in the legal system, by recourse to tort law. An important feature of the system was therefore that the determination of benefit levels was separated from the source of funding, with compensation drawing on the "deep pockets" of liability insurance companies. This made for financial unsustainability, and for considerable incentive problems in respect of both accident prevention and cost containment.

However, it is incorrect to assume that these deficiencies indicated the unviability either of private, competitive insurance arrangements or of access to the tort system - as was effectively assumed by the 1967 Royal Commission of Inquiry into accident compensation. Rather, to a large extent they indicated the problems that could be created by significant intervention both in insurance markets and in liability rules.

The focus of this paper is on the creation of conditions under which competitively provided voluntary insurance would be the primary means of handling accident risks and, in particular, of providing income protection. However, we would argue that such moves could usefully be supplemented by a reconsideration of the "no-fault" approach to accident insurance taken by the accident compensation scheme. While recourse to tort rules as a means of dealing with the costs of accidents can justly be criticised as a poor means of providing income protection, there are cases in which it can play a significant role in creating or reinforcing incentives to take an appropriate amount of care, both in deciding whether or not to undertake a certain activity, how much of it to undertake, and how much care to take while engaged in that activity. It does so by providing for people who impose costs on others to themselves bear the brunt of those costs; in other words, it promotes the internalisation of the costs of dangerous or obnoxious activities, including those that fall on outsiders.

There will clearly be cases in which deciding liability and appropriate damages in the courts will be very costly, although this may to some extent be facilitated by the choice of liability rule. There will also be many cases where the relationship between the person "responsible" for an accident, and the victim of that accident, is such that they are capable of dealing with the risks of accidents contractually at lower costs than they would face if they were obliged to rely on the courts alone. For example, in the great majority of employment situations, it is feasible and relatively efficient for employees and employers to specify between themselves risk-handling arrangements that may include some combination of safety rules, wage premia, insurance and arbitration arrangements for disputes concerning such rules.

In other situations, however, there is more clearly a role for access to tort as a means of supplementing private insurance arrangements. This is likely to be most significant in situations involving individuals who are strangers to each other (where the costs of contracting around risks beforehand can be very high), as is the case with a large proportion of motor vehicle accidents. There is now increasing evidence that the adoption of "no-fault" regimes for motor vehicle accidents, in a number of jurisdictions, has led to reduced incentives for care and increases in the costs imposed by accidents¹¹.

The capacity of tort actions to deter accidents depends very much on both the choice of liability rules and the legal process adopted¹², and the nature of any ongoing government role in regulation of insurance markets. The experience in the United States suggests that the combination of flawed tort regimes and at times extensive government intervention in insurance markets can produce decidedly unhealthy - and unhelpful - results. There is a need, therefore, for careful analysis not only of the deterrent effects of differing tort rules, but also of the way in which regulatory and legal regimes interact, before reintroducing access to tort actions for accidents in New Zealand. The case for such access should not be dismissed out of hand as is often the case in discussions on this topic in New Zealand.

¹¹ See, for example, Rea, S.A. (1987), "Economic Analysis of Fault and No-Fault Liability Systems", *Canadian Business Law Journal*, Vol. 12, pp 444-472.

¹² For example, the problems experienced with recourse to tort remedies in the United States appear to derive at least in part from the practice of relying on juries to decide both liability and the level of damages, and from the tendency to allocate liability according to the relative depth of the pockets of the parties' insurance companies. One way of addressing the problem of excessive payments associated with the use of tort in the United States is for fines to be paid into the state coffers rather than being treated as compensation for the "victim".

SECTION 6: DESIGNING A REFORM PROGRAMME

In Section 2 we suggested that the current legislative framework for the ACC, and its position as a statutory monopolist, substantially weaken both its incentives and its capacity to act as a fair and efficient provider of accident insurance. This weakness could be addressed by establishing the Corporation as an SOE, and removing its statutory monopoly rights (and other regulatory advantages and disadvantages). However, there are still inherent problems with the SOE framework, in that commercial institutions that remain in government ownership are not subject to the same range of capital market disciplines as their private sector counterparts, and are vulnerable to political interference.

Were the market in accident insurance to be deregulated, so that the ACC operated on an even footing with other insurance companies, there would therefore be a strong presumption in favour of moving a step further and privatising it. There are a number of institutional models that could be adopted in this case. A privatised ACC could be established as a financial mutual, a privately-owned corporate, or a hybrid of the two - all three models are observed in the private sector.

In moving either to establish the Corporation as an SOE or to full privatisation, the most difficult issues to be resolved relate to the pay-as-you-go nature of the scheme and the present degree of under-funding. Both "corporatisation" and privatisation would require that the ACC operate on a fully-funded basis. There are two principal criteria to be satisfied in achieving this: first, to minimise the cost of meeting its existing liabilities, and, secondly, to minimise any distortions to the overall disability insurance market that could arise from the funding of these liabilities.

There are two broad options for the recapitalisation of the ACC. One is to fund the ACC's present, unfunded liabilities on a once-off, lump-sum basis and to establish a commercially acceptable level of free reserves. The other is to continue to meet the existing (but not the future) liabilities on a pay-as-you-go basis. One variant on this option would be to contract out the management of existing liabilities to the private sector, with the government meeting the costs of this contract (or funding it through special levies).

The recapitalisation of the ACC, and the decision about whether to establish it as a corporate, a mutual or some hybrid of the two, are matters that would require specialised

technical and management knowledge. In our view, the incentives to get this right would be far stronger for private owners than under public ownership. In addition, early privatisation of the Corporation's liabilities could be argued to be preferable to an ongoing government responsibility to fund these liabilities.

Within the insurance market, there is a belief that many of the international and domestic companies that presently participate in the New Zealand insurance market would be likely to enter the accident insurance market were the ACC's statutory monopoly to be terminated. It might, however, take six to twelve months for new entrants to establish themselves as significant players in a deregulated market. To bridge the gap between deregulation and the establishment of significant new competitors for the ACC's business, the Corporation could be maintained as an SOE for some initial period - twelve months would seem ample. This period could also be used to review in greater detail how existing liabilities might be funded, and how the selling process might best be structured.

Another issue to be considered in deciding on a process for "corporatising" and privatising the ACC is how this would fit into a broader process of health sector reform. Under the present accident compensation scheme, treatment for injuries is divided between public and private sector health professionals and institutions. With some restrictions, the ACC pays for services provided by private hospitals and doctors' fees; it does not pay for services provided by publicly-owned institutions. At the same time, private sector health insurance companies cover treatment in private hospitals and some other health-care charges faced by their policy-holders, but do not reimburse public health institutions for any treatment that the latter provide to policy-holders.

A move to place accident insurance in the hands of private insurance companies, with or without some form of subsidisation, would mean that their position vis-a-vis publicly funded providers of health care, including access to accident and emergency services, charging for such services and the capacity of accident insurers to contain the costs of services purchased from public providers, would need to be clarified. Resolution of these issues should be handled in the context of wider reform of the health system - and could, indeed, be seen as a means of facilitating the transition to a more efficient health system overall.

The ACC could, of course, be corporatised and privatised in isolation from other reforms in this sector. More generally, however, it could - and, we believe, should - be regarded as an

integral part of a reform process in the health sector involving corporatisation, and eventual privatisation, of both the provision and funding of health care¹³.

In the latter case, the merits of different sequences of reform are worth considering. However, there would seem to be a strong case, given the resolution of issues surrounding payments for services, for proceeding directly with the "corporatisation" and privatisation of the ACC, thereby enabling it to work on a similar basis to private sector health insurance companies.

¹³ A set of proposals for such a process are set out in Danzon, P.M and CS First Boston NZ (forthcoming), cited in note 6 above.