The Rhetoric versus the Reality: New Zealand's Experience Rating

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Abstract

There are two views of New Zealand's Accident Compensation (ACC) scheme; the first view is that the scheme is a social programme and the second is that it is an insurance-based programme which, for historical reasons, happens to be run by the state. The later, insurance-based view, leads in particular to the adoption of experience rating in the belief that this will promote fairness and safety. However, there are lessons from New Zealand's past that suggest that experience rating is not only complicated and is likely to be expensive to administer and also have little success in achieving the objective of safety in the workplace. The introduction of experience rating in New Zealand not only forces a reexamination of the insurance-based direction imposed on ACC in recent years but its also provides lessons for other countries contemplating introducing similar experience rating systems.

Introduction

Driven by a desire to completely change the previous fault-based system for workers' compensation and create a fairer system for the victims and their families, New Zealand introduced a universal no fault, comprehensive accident compensation scheme in 1974. Not only was this a major social reform, but it also represented a radical shift in thinking. A Royal Commission in 1967, chaired by Sir Owen Woodhouse, envisaged a social contract in which New Zealanders surrendered the right to sue for personal injury but received more certain, equitable and adequate compensation, rehabilitation and medical care, whether the injury occurred at work or at home and whether or not the fault could be established. To fund this scheme, Sir Owen proposed a standard flat levy rather than using the risk-related levies that had been the practice under market-based workers compensation schemes (Royal Commission of Inquiry, 1967).

It was not unexpected that this radically new approach to compensation for injury was controversial, yet most of the recommendations in the Woodhouse Report were given effect in 1974 with the passage of the Accident Compensation Act, and a new a Crown Entity, the Accident Compensation Corporation (ACC)¹ was charged with the administration of the scheme. Unfortunately, the ACC Act also carried over features of the previous workers compensation scheme, including the cumbersome system of industrial differential levies based on risk for work accidents and a provision for rebates and penalties.²

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From the beginning, there was tension between those who viewed ACC as an insurance scheme (which happens to be currently run by the state) and those who viewed ACC as a social programme, rather like health and education. On the one side of the argument lies the efficiencies of the free market and on the other, the advantages of a state-run and publically funded programme³. New Zealand's experiments with experience rating since the 1970s, including the latest version introduced in 2011, reflect this tension.

This paper reviews the past history and examines the efficacy of introducing experience rating within a changing working environment, and concludes that the case for the 2011 experience rating scheme is thin. Moreover, the emphasis on private insurance methods, including experience rating, is likely to facilitate the reintroduction of private insurers and undermine the advantages of New Zealand's unique workers' compensation approach. In order to understand the context in which New Zealand's experience rating scheme was recently introduced, the different views of ACC are first examined.

The two views of ACC

ACC is based on five guiding principles known as the Woodhouse principles as set out in the Royal Commission of Inquiry, 'Compensation for Personal Injury in New Zealand' (see section entitled: *Community Responsibility*), it states that:

In the national interest, and as a matter of national obligation, the community must protect all citizens (including the self-employed) and the housewives who sustain them, from the burden of sudden individual losses when their ability to contribute to the general welfare by their work has been interrupted by physical incapacity (Royal Commission of Inquiry, 1967).

The five guiding principles are as follows (ibid: 177-178):

- 1. Comprehensive entitlement. "All injured persons should receive compensation from any community financed scheme on the same uniform method of assessment, regardless of the causes which gave rise to their injuries."
- 2. *Complete rehabilitation*. "The scheme must be deliberately organised to urge forward the physical and vocational recovery of these citizens while at the same time providing a real measure of money compensation for their losses."
- 3. *Real compensation*. "Real compensation demands for the whole period of incapacity, the provision of income-related benefits for lost income and recognition of the plain fact that any permanent bodily impairment is a loss in itself, regardless of its effect on earning capacity."
- 4. *Administrative efficiency*. "The achievement of the system will be eroded to the extent that its benefits are delayed, or are inconsistently assessed, or the system itself is administered by methods that are economically wasteful."

While the Woodhouse principles are widely supported, the debate over whether ACC should be an insurance scheme has continued since 1974. On one side of the debate, the ACC is characterised as a public institution implementing social (collective) policy and, thus, rightly a part of government as both a political as well as economic entity. On the other side, the ACC is seen as a government agency attempting to provide insurance, much as other privately held insurance companies that operate as individual corporate actors seeking to make profits and responsive to market incentives. Moreover, although few participants in the debate over the future of ACC would accept political labels as either 'socialists' or 'neo-liberals', the battle is, nonetheless, divided along ideological lines. Disagreements over the role of government, the role of private insurance methods, and the benefits of market

competition lie at the heart of the debate. An outline of the differing views and their implications are set out in Table 1.

Table 1: Two competing views of ACC

ACC viewed as social programme	ACC viewed as private insurance scheme		
Based on the "social good" model	Based on corporate model		
Operated in the public sector	Operated by the state but run largely by the private sector		
Broad coverage to incorporate emerging risks	Coverage limited to known and accepted risks		
 Compensation based on principle of collective responsibility 	Compensation based on principles of contract law and agreed assumption of risk		
ACC is a neutral arbiter representing the interests community over the interested of the employee or employer	ACC, as an insurance company, is responsive to it funders (the employers) and responsible to ther for the provision of effective compensation a minimal cost		
• ACC can be financed on "Pay-as-you-go basis"	ACC must be "fully-funded" as is required for private insurance		
• Fairness requires that all employers pay similar levies (flat-rate)	Fairness requires that levies be determined on the basis of risk (differential levies)		
Mechanisms to achieve safety objectives (prevention) are outside of the levy system	•		

While the ACC is often referred to as 'social insurance', it is also clearly part of a social safety net, as Ian Campbell (1996: 82-83) notes:

Describing the scheme as being one of insurance as opposed to welfare is rather a matter of semantics. A forthright comment on the use of the word "insurance' comes from Vennell [1993] who stated: ... it is largely fallacious to describe the scheme as an insurance scheme for unlike true 'insurance', the 'insured' cannot negotiate the terms of the policy including the extent of the cover and the premiums to be paid.

On one hand, underlying Sir Owen's principle of community responsibility is the belief that, in modern society, accidents are an inevitable consequence of interdependent social and economic activity from which all benefit and, therefore, the risk of injury by accident should be shared by everyone in the community. Those who view the ACC as a social programme see the use of differential levies and experience rating as a retreat from the Woodhouse principle of community responsibility (Oliphant, 2004; Gaskins, 2008). On the other hand, in market-based insurance schemes, it is the common law that deals with issues raised by accidents in tort, and it is generally accepted that a loss or injury caused by accident lies with the individual or their insurance company, unless someone else can be shown to have been at fault (Wilkinson, 2003). Pricing based on risk is also a key feature of market-based insurance schemes. Typically, in workers' compensation schemes, risk is taken into account via the development of differential levies based on industrial grouping. Under 'experience rating', these levies may be modified for individual employers by their accident experience. In theory, experience rating provides an economic incentive to prevent accidents. While experience rating does not re-introduce the fault principle into the payment of compensation for personal injury, it may raise issues of fault for the assessment of employer levies and associated litigation.

Funding workers' compensation in New Zealand

The different components of the complex funding arrangements for ACC are set out in table 2, showing the five different accounts and what they cover. It should be noted that, for purposes of the experience rating of employers, compensation for people injured at work is funded out of the Work Account.

Table 2: The Five ACC Accounts

ACC account	Who funds it?	What is covered
Work (workers' compensation)	Employers, based on the wages or salaries they pay their employees in a financial year (called 'liable earnings'). Self-employed people and private domestic workers – based on their earnings.	Work-related injuries affecting employees, self-employed people and private domestic workers (excluding most motor vehicle injuries). The continuing cost of work-related injuries that happened before 1 July 1999, and non-work related injuries to earners that happened before 1 July 1992.
Earners	Employees, self-employed people and private domestic workers, based on earnings.	Non-work injuries to people in the paid workforce when they are at home or during sport and recreation
Motor vehicle	Motor vehicle owners, users and motorists through a levy collected from petrol sales (the petrol levy), and a levy collected when licensing a vehicle (the licence fee levy).	Injuries involving moving motor vehicles on public roads.
Non earners	The government.	Injuries suffered by people not in the paid workforce (such as students, beneficiaries, children and retired people).
Treatment injury	Earners (through the Earners' Account) and a government contribution for non earners.	Injuries caused by medical treatment.

Source: ACC, 2011a

The ACC sets the annual levies necessary for each separate account and, until recently, it has not been required to meet the strict actuarial funding standards set for private insurance companies. Nevertheless, there has always been a buffer of reserves. The value of these reserves (compared to annual claims) has fluctuated according to changes in views of the degree of funding necessary (St. John, 2010). In contrast, private insurance companies are "fully-funded" in that they must maintain sufficient reserves to meet future liabilities.

Over the past decade, the rules regarding funding have changed on several occasions. In 2001, a Labour Coalition Government reversed the privatisation of the work account undertaken by the previous National Government in 1998. The new legislation, entitled the 'Injury Prevention, Rehabilitation, and Compensation Act 2001' (also known as the Accident Compensation Act, 2001) removed the role of private insurers. It did, however, require ACC to be fully-funded by 2014. This meant that ACC had to charge levies which would meet current and future costs of claims by 2014, and was to have sufficient assets to meet the costs of all pre-1999 claims. National was elected in 2008 and extended the dead-line by which ACC had to be 'fully funded' to 2019. Putting ACC on fully-funded basis is also consistent with the 2011 National Government election manifesto to privatise the workers' compensation part of the ACC and open it up to competition.

All employers and self-employed people pay levies into the ACC Work Account to cover injuries that occur at work. From its inception, the ACC has used a risk-based classification system for the Work Account whereby business activities are grouped so that the costs of work injuries are distributed among those industries with similar characteristics. Employers are placed in the classification units (CU) and then the CUs are combined into 'levy risk groups' which are then used to estimate for each group the risks and costs of future injury claims. Employers may have several CUs but individuals (the self-employed) may only have one. The ACC sets the levy rate for each risk group by comparing costs of previous claims with total earnings within that activity group. In the 2011/12 year, there are 143 risk groups covering 536 CUs. The levy for each risk group is determined on the basis of the number and costs of injury claims in that group in the past year and the number and on going costs of injuries predicted for the coming year. The levies charged to the individual employer are the industry-based work levy.

The ACC work levy (that is, the amount which the employer pays for workers' compensation) is calculated as a percentage of an employer's 'liable earnings'. That is, the levies paid are based on employers' payroll (or the earnings in the case of the self-employed) and on the injury-related risks associated with the industries in which they work. Without experience rating, the levy rate is the same for all employers within each industry group regardless of individual employer safety record. Table 3 provides examples of how a combination of the risk rated levy, the number of employees and their average wage determine the levy actually paid. It is interesting to note that, from the examples, the way in which work levies are determined bears no relationship to the status of health and safety in the workplace.

Table 3: Examples of how work levies are determined- 2011

Example: High Work Levy Rate

An employer paying an annual average wage of \$40,000 and a work levy rate of \$6.91 per \$100 liable earnings would meet the \$10,000 experience rating threshold with around 3-4 employees

Example: Average Work Levy Rate

An employer paying an annual average wage of \$40,000 and a work levy rate of \$1.15 per \$100 liable earnings would meet the \$10,000 experience rating threshold with around 22 employee

Example: Low Work Levy Rate

An employer paying an annual average wage of \$40,000 and a work levy rate of \$0.25 per \$100 liable earnings would meet the \$10,000 experience rating threshold with around 100 employees

Source: Interview with ACC official

With regard to the other accounts, in 2011, the Earners Account is funded by a flat rate levy on the income earned by workers, while the Non-Earners, the Motor Vehicle and the Treatment Accounts are funded via levies and indirect taxes. That is, Motor Vehicle Account is funded by a petrol levy and motor vehicle registration fee and the Treatment Account is funded by drawing on both the Earners and Non-earners Accounts. Earners (those who earn sufficient income to pay income taxes) receive compensation for injury resulting from accidents, such as at rugby in the weekend, similar to that received by a worker injured at work. The difference, however, is that if it is a work-related injury, the first week's compensation is paid by the employer, while if it is not work-related the worker may lose the first week's pay. Illness is not covered by the ACC except for those that are caused by recognised occupational disease (for example, an asbestos-related disease). Psychological or mental illness is also not covered unless found to be work-related or caused by certain criminal acts, such as sexual assault.

ACC programmes

The Experience Rating Programme sits across a suite of other programmes, namely the Partnership Programme, Workplace Safety Management Practices, Workplace Safety Discounts, and Workplace Safety Evaluation, in which each is designed to accommodate the different sizes and types of businesses.

The Partnership Programme (also known as the Accredited Employers Programme or AEP), is similar to many other overseas self-funding schemes and is not a programme intended to promote safety but rather to reduce costs. More precisely, the Partnership Programme is characterised as a "social partnership" between ACC, employers and employees and employees. By 2007, it had provided coverage for approximately 316,358 full time employees, or around 25% of the full-time workforce. While any employer can apply for entry to the ACC Partnership Programme, the programme was developed and is considered to be suitable for very large employers whose ACC levies exceed \$250,000 per year. The ACC Partnership Programme also allows accredited employers direct input into managing claims and in reducing overall costs. That is, once employers are accredited, they administer their own workers' compensation by managing claims and *ipso facto* claim costs. The ACC explains that: "both employers and employees benefit from effective injury prevention and management. Well managed claims reduce work-related injury costs, including ACC levies, and promote the early and safe return to work of employees after an injury" (ACC, 2010a).

Under the Partnership Programme, there are two options for managing claims: Partnership Discount Programme and Full-Self Cover Plan. In 2007, there were 36 employer groups on the Partnership Discount Programme and 118 employer groups in the Full Self-Cover Plan. In the Partnership Discount Plan, the employer assumes responsibility for the management and costs of their employees' work-related injuries and illnesses for a nominated claims management period. At the end of the selected claims management period, if an injured employee is still receiving entitlements, financial and management responsibility for the claim will be transferred to ACC. Some residual liability may exist in respect of gradual process claims.

In the second option, the Full-Self Cover Plan, the employer assumes responsibility for the management and costs of employees' work-related injuries and illnesses for the life of the claim, limited to the stop loss level chosen by the employer. The stop loss limit can range between 160% and 250% of the 'risk'. At the end of the selected claims management period, if an injured employee is still receiving entitlements, financial and management responsibility for the claim will be transferred to ACC at a calculated price. Under this programme, the employers' levies can be reduced up to as much as 90%.

The Workplace Safety Management Practices (ACC, 2011) is a voluntary programme aimed at medium and large employers and in 2007, there were 1,823 organisations involved with the Workplace Safety Management Practices programme. Employers in the programme have an average of 106 full-time equivalent employees (ibid). If the employer wishes to participate in the Workplace Safety Management Practices programme, they undertake a workplace self-assessment using an audit tool designed by the ACC. This audit is then followed by a workplace audit that must be undertaken by an independent health and safety auditor approved by ACC. Employers who meet the standards required by the programme will receive 10% to 20% discounts on their ACC Workplace Cover levy, depending on their level of compliance with specified requirements for workplace safety.

The other voluntary program is the Workplace Safety Discounts Programme and is designed for the self-employed and small businesses in a number of high risk industries (agriculture, construction, fishing, forestry, motor trades, road freight, and waste management). For this programme, small businesses are also defined as those that have a total annual payroll of \$450,000 or less, or have 10 or less full-time employees. To qualify for the discount (10% off the work cover levy), the small business or self-employed person must be engaged in work that falls under one of the specified classification units and have attended a free, industry-specific training course, unless they can prove that they already have the appropriate experience. The employer then undertakes a self-assessment which is submitted with the application to ACC. In some cases, ACC may require an independent audit to be carried out.

Under the Workplace Safety Evaluation Programme, the ACC addresses the issue of the 'high risk' employer. As outlined previously, ACC levies have been set on an industry or activity basis and employers in the same industry have paid the same rate. That is, if one employer within an industry sector has a significantly higher number of workplace injuries, the costs of those injuries are carried by all of the employers in that industry regardless of whether other employers have had any injuries. However, if one employer continues to have a high number of workplace injuries year after year, this indicates that there may be an issue of work safety or health that needs to be addressed. More importantly, a return to experience rating in 2011 will see individual employer levies adjusted in an attempt to reflect safety performance, as discussed below.

Experience Rating; the experience in New Zealand 1974 – 1990s

The original 1974 ACC legislation allowed for experience rating in the form of a possible 50% rebate or 100% penalty on the levy rate. At that time, the employer levy also covered non-work accidents, but it was only the work-related part that was experience-rated (St. John, 2010). Thus, the distinction between work and non-work accidents was important, even though the unified scheme treated the injured employer the same for both. A study undertaken by St John (1981) investigated how such a scheme might have been introduced in a statistically valid way. The freezing industry was used as a suitable exemplar for experience rating because it was an industry with a high accident rate and a large number of similar competing firms. Since claims data is not a sound basis for determining safety, (as, for example, fatalities could be cheaper than long-term accidents, among other problems), it was fortuitous that there was good accident frequency data from a special report The Nordmeyer Report on accidents in 1976-7 (Nordmeyer, 1977). Applying the principle that accidents are random and probabilities conform approximately to a Poisson distribution, accident frequency (both for all accidents and for those injured workers requiring compensation over seven days) was used to determine whether any one firm was statistically better than the industry average. The actual outcome for a firm was compared to the mean/average for the industry. If the experience was outside 95% confidence limits then it could be assumed that the firm was better or worse in a statistical sense.

The study found that while statistical validity could be established and a rate-modification formula worked out, the critical point was that the outcome was depended upon which frequency was used. Moreover, there was an arbitrary and often large variation in the rebate or penalty calculated in these two ways, when theory would suggest they should be of the same order. Another issue was that even within this relatively homogenous industry, firms were not strictly comparable. For example, firms differed considerably in the nature of the work undertaken and the risks of that work. The conclusion, therefore, was that any system was bound to be arbitrary and although it may mitigate problems of classification, such a system would have little to do with safety. Moreover, if it could not be made to work effectively in the freezing industry, which had a large number of reasonably similar firms,

rigorous data on hours worked and a high accident rate, it was unlikely to work anywhere (St. John, 1981).

In spite of these issues, there was a timid attempt to pay 'good firms' a rebate in the early 1980s in order to make the experience rating provision in the 1974 Act operative. While the basis was accident numbers and not cost of claims, the frequency measure was not based on hours worked but on the wage bill and there was no attempt to tailor the rebate, which was a flat, taxable 12.5% of levies. The reward was based on the previous three years' experience and, thus, well divorced from experience. Ironically, in November 1980, Air New Zealand was awarded a rebate after experiencing one of the world's worst air disasters in the Antarctic in November 1979, in which 237 passengers and 20 flight crew were killed when Air New Zealand plane crashed into the side of Mt Erebus. Of course, none of the passengers who lost their lives became a cost allocated to Air NZ because they were not employees of the firm, highlighting yet another problem with experience rating. Other recipients were hardly high risk, for example, government departments, education boards and the Public Trust Office, and the reward was unlikely to have anything to do with safety. One of the clear downsides was that in order to give rebates to 'good firms' and unless penalties were also levied, the cost would cause a rise in the average levy rate. The scheme was dropped after a few years without a reason given (Campbell, 1996).

A form of experience rating involving bonuses or penalties for some employers was again attempted in the 1990s. The government had described evidence for experience rating 'at best equivocal', yet argued that it could be justified on equity grounds because it "overcomes the problems of broad industry classifications" (Birch, 1991). The scheme was not based on accident frequency but on claims experience, including lump sum payments and death benefits. Costs for injuries arising from gradual process or industrial diseases were also included (ACC, 1992).

As with the previous attempt to introduce experience rating, there were also problems with the 1990s' experiment. For example, in spite of the fact that most employers qualified for a rebate, Campbell (1996) argues that no statistical significance could be attached to being claim-free for most of these firms as they were too small. Moreover, firms located in declining hazardous industries, such as the freezing industry, often experienced a sharp rise in levies that were quite independent of their safety record (St. John, 1999). The 1990s was also a time of rapid and significant industrial and labour market restructuring. Therefore, under the 'pay-as-you-go' levy setting, each industrial class must be levied sufficient to meet all the accident costs paid for that year regardless of when the accident occurred and regardless of the problems associated with times of rapid change. Campbell (1996) cites ACC claiming large penalties levied on the Fire Service and the Post Office may have caused them to take action to reduce claims costs. However, Campbell also concludes that, in large part with PAYG levies, experience rating was more about adjusting for different activities within broad-based classifications.

The 2011 Experience Rating Framework

Against a backdrop of controversial levy reforms of the ACC driven by the National Government's view that the agency was under financial pressure and their desire to privatise workers' compensation, the ACC created an experience rating framework in 2011 in which the objectives are:

- to provide a financial incentive to prevent injuries;
- to encourage appropriate return-to-work programmes; and
- to make levies fairer for businesses, by ensuring that low-risk employers do not subsidise high-risk employers.

The experience rating framework consists of two parts: a) industry risk groups; and b) two new performance pricing programmes, as outlined in Table 3. Experience Rating Programme is designed primarily for large businesses with an annual levy of \$10,000 or more and is intended to recognise and reward effective workplace safety practices and return-to-work programmes. The No-Claims Discount Programme is designed for small employers (a no-claims discount or a high-claims loading) in which small business employers and self–employed will have a no-claims discount or a high claims loading.

The ACC will assign employers who qualify for the Experience Rating Programme to a group with similar industrial activities and similar injury risks (the Levy Risk Group). The grouping permits the costs of work injuries to be distributed among employers with a similar risk of injuries and, for the purposes of experience rating, for the comparison of the employer's claims experience. The ACC will then develop a claims history for each employer which records the number of weekly compensation days, the number of fatal claims, and the number of claims with medical costs of \$500.00 or more. If one employer's claim experience "compares favourably with others in its Levy Risk Group, its levy may be discounted" (ACC, 2012). Conversely, if the comparison is unfavourable, then the employer's levy may receive a loading. The maximum modification of the levy is plus or minus 50% of the annual work levy.

In the No-Claim Discount Programme designed for small employers, employers who qualify could receive a 10% no-claims discount, a 10% high-claims loading or no change to the current portion of their annual work levy depending on their claims history. Under this scheme, an employer receives a 10% discount in the work levy rate if no weekly compensation days are paid over the experience period, and a 10% increase if they have claimed more than 70 weekly compensation days or have a fatal accident. If the employer claims between one and 70 weekly compensation days, then there is no change in the work levy rate. The no-claims system is weighted towards a rebate, with most small employers, as expected, having a nil accident record in the period. This implies a loading on the average work levy.

Table 4: 2011 Experience rating and No-Claims Discount Programme

	Experience-Rating Programme	No-claims discount programme	
Annual Work levy	\$10,000 or more per annum for	Less than \$10,000 per annum for all or	
	each of the three years in the	any of the three years in the experience	
	experience period.	period	
Experience period	3 years		
(based on claims			
history)			
Qualifying claims	 number of weekly compensation 	 number of weekly compensation days 	
	days paid	paid	
	 number of claims with medical 	• any fatal claim	
	costs > than \$500		
	any fatal claim		
Maximum possible	The maximum modification up to	The maximum discount or loading will be	
loading/ discount	+/- 50% of the business's standard	+/- 10% of the business's standard	
	industry levy rate.	industry levy rate.	
Based on individual			
performance	Yes	No	
comparative to industry			
peers			
Formula	Modification comprises:	• 'no claims discount' of 10% if no	
	 Industry size modification 	weekly compensation or fatal injury	
	• experience rating modification	claims were made over the experience	
	(weekly compensation days paid,	period.	

and number of claims with medical costs greater than \$500, and fatal claims).	generated between one and 70 weekly compensation days paid • a 10% loading will be applied if the business has generated more than 70
	weekly compensation days paid or any
	fatal claim

Source: ACC, (2011b; 2012)

It is anticipated that experience rating will only apply to 1.2% of employers while 49% will be in the "no claims discount" programme (see Table 4). In terms of coverage, employers now participating in the Partnership Programme and those included in the Experience Rating programme represent only 1 to 2% of employers but employ about half of all New Zealand workers. The only businesses which are to be exempt from Experience Rating or No Claims Discount are those businesses whose liable earnings are less than \$26,520 (as of 2010/11 period).

Table 5 Coverage in incentive programmes

Type of employer	Incentive Programme	Number of employers	Percentage of employers	Percentage of Earnings
ACC Partnership	Accredited Employer Programme	136	0.02	20%
Employers: • Large	Experience Rating	5,050	1%	31%
• Small	No-claims discount	110,500	20%	31%
Non-Paye shareholder, employees, and self employed	No-claims discount	126,000	23%	8%
Exempt Group	No incentive programme	315,000	56%	10%

Source: ACC (2010b).

The desire to ensure that an employer's accident history was compiled fairly and then compared with similar employers has resulted in the development of complex formulae, as illustrated by the extract in the appendix from the Accident Compensation Experience Rating Regulations (NZ Legislation, 2011). The type of industrial activity and the size of the business (calculated in terms of earnings) are taken into account as well as the nature of the event. In addition, claims "resulting from injuries resulting from adverse events" (ibid: 24) or those for occupational hearing loss or injury due to exposure to asbestos will *not* be considered as part of an employer's claim history. The Minister for the ACC is responsible for determining and declaring when an "adverse event" had occurred, for example, the February 22 2011 earthquake in Christchurch was declared an adverse effect.

The calculation for experience rating levies in the 2011 is based on a measure of compensatable days per total earnings, not hours worked, and so is not a true measure of accident frequency. While the numbers of deaths that involve medical costs of more than \$500 are included as claims in order that the pitfalls of relying on just compensational days are avoided, the decisions around how to count accidents is inevitably arbitrary. For example, the medical cost of the claim may require information over a long period of time. The number of compensatable days depends not just on the severity of the

injury but the ability of the injured worker to return to work in either full or limited capacity (Quinlan, Bohle and Lamm, .2010). If the employer is unwilling or unable to have a partially disabled worker return to work, then rehabilitation will become more difficult. These calculations, however, rely on adequate data being available, and as with the 1970s-1980s experience rating scheme, there are issues around the reliability and rigour of the injury data used as the basis of establishing the experience rating levies. Part of the reason for the 2011 scheme is to encourage a rapid rehabilitation of workers and their return to work. The narrow focus of experience rating on work injuries, however, provides no incentive when an injury is non-work related.

Two central sources of work-related injury data in New Zealand are compiled by the Department of Labour (DoL) and ACC in which both agencies have a statutory duty to collect, analyse and summarise injury data as part of their annual reporting. The DoL compiles occupational injury datasets based only on notifications of serious harm as defined under the Health and Safety and Employment Act, 1992. The injuries listed by the DoL are primarily those that have been brought to the attention of the DoL and the datasets, therefore, represent at best regulatory investigations. The ACC together with Statistics New Zealand mainly generate claims data for the purposes of administering claims and managing rehabilitation resources. An added complication is the fact that injury definitions and categories within the government agencies' databases have changed over time. Furthermore, the latest data publically available on the ACC website dates from 2007- 2008 (the year the National Coalition Government was elected), and the national census (which provides valuable background data) was cancelled in 2011 following the Christchurch earthquake in 2010 and 2011. Thus, given that government databases are incompatible and inconsistent within and across departments and are not current, any comprehensive analysis is difficult if not impossible.

Also, injury data depicted as compensation days are unreliable as they do not represent the true numbers of work-related injuries or fatalities. The main reasons are: a problem of under-reporting, not all workers are eligible for compensation (e.g. self-employed workers) and some injuries are either not covered or it is difficult to establish a casual link between the injury and a work activity (Quinlan et al., 2010). This may be a particular problem in New Zealand where the employer (in order to lessen the number of work-related claims) and/or the employee may attribute a work-related injury to a non-work activity. In most cases, the worker would have little incentive to challenge the classification of the injury if the employer paid the first week's disability, and it would be difficult for the ACC to know that the misreporting had occurred. In this scenario, the worker would be compensated from the Earners' Account and, consequently, the data for rate of injuries in both accounts may be wrong.

Furthermore, workers in precarious employment often under report work-related injuries because they are either concerned about their continued employment or they have difficulty in pinpointing the exact time and cause of the injury because of the nature of their jobs (ibid). The pitfalls of using government injury and illness statistics as a basis for definitive conclusions is clearly illustrated in Mayhew and Quinlan's (2000) study of workers in the clothing, textile and footwear industry. Their study shows that workers in industries with a high incidence of precarious employment are likely to be under represented in the workers' compensation claims and injury or illness data, even though they may be experiencing similarly high levels of injury and illness as so-called 'high-risk' industries. Given the absence of data on occupational injury and illness rates in New Zealand, it is clear that injury rates are considerably underestimated and present an inaccurate picture regarding the safety at work. Arguably, ACC injury claims data can only be used to indicate possible trends in certain sectors or work activities as the difficulty is the imprecise nature of the datasets. The problem is also in getting the formula's balance right, in that enough employers receive penalties and bonuses that are significantly large enough to have an impact on the way they manage OHS, and that the penalties and bonuses more or less balance out so that ACC's account-balance is on target (Krajl, 1994).

In summary, perhaps one lesson to be learnt from the past application of experience rating is that the correct setting of the levy, while desirable if experience rating is to have some connection to safe behaviour, it is nonetheless a difficult exercise (St.John, 2010). In all the experience rating schemes since the 1980s, the setting of levies to reflect accident experience accurately is fraught with difficulties, given changing industrial structure and the degree to which levies were constantly adjusted to reflect changing attitudes around the need to fund or run the scheme as pay-as-you go and the general inaccuracy of the injury data used as the basis of setting the annual levies. Whether or not all these factors make experience rating unworkable is open to conjecture. However, these are not the only issues and there are also a number of fundamental questions that will be examined in the next section.

Questions and challenges

The introduction of New Zealand's latest experience rating programme raises a number of questions. The first obvious question is why was the recent form of experience rating introduced into New Zealand, given the previous evidence from both New Zealand and overseas that experience rating provides little incentive for employers to improve safety (Campbell, 1996). That is to say, the evidence that experience rating leads to better prevention and, hence, fewer *injuries* (as distinct from fewer *claims*) is mixed. As discussed above, while experience rating creates incentives of some kind, it creates perverse incentives to distort claims reporting and as argued, the experience rating system, retrospectively, rewards employers' management of claims, possibly at the expense of genuine efforts to prevent illness and injury at work (Thomason and Pozzebon, 2002; Harcourt, Lam and Harcourt, 2007). The answer to this question, therefore, may lie with politics of workers' compensation rather than prevention or financial benefits. The current government is determined to privatise a number of state-owned enterprises and/or to open government agencies, such as ACC's workers' compensation, to direct competition with private sector providers. Introducing experience rating has been part of the process of getting New Zealand's workers' compensation ready to be opened up to private insurers in 2012, thus transforming the workers' compensation part of ACC into a more insurance-based model.

The second question is whether experience rating will improve New Zealand's occupational injury rate? The number of work-related injuries and illnesses in New Zealand continues to be high compared to other OECD countries and the rate of fatalities has remained relatively static until recently when it spiked as a result of the Pike River Coal Mine explosion in which 29 miners died. Similar jurisdictions, such as Victoria and Queensland, have half the rate of occupational fatalities compared to New Zealand (see table 6). In 2007/8, 285,400 (out of a workforce of 2,26 million) New Zealand workers suffered an injury at work (StatsNZ, 2011). Of these, 37,700 people were injured severely enough to be off work for more than one week. In the same period, 119 people died as result of a work-related injury⁸ (ibid). It has, therefore, been tempting to look for easy answers to improve this record, and experience rating is one such intuitively appealing option. Furthermore, as studies have shown overseas, determining the effect of experience rating on the accident and disease rate will be difficult to ascertain (Ruser, 1991; Lippel et al., 2011). The challenge is made even more difficult in New Zealand, given the potential for experience rating to affect how injuries are classified, as workrelated or not, which in turn will skew the work-related injury data. That is, experience rating adjustments are calculated on the basis of the number of workers' compensation claims and workers may be encouraged not to report injuries or to report the injury as the result of a non-work accident.

Table 6: Injuries resulting in Fatalities and Lost Time

Country	Fatalities	Fatalities Rate per 100,000 workers	Accident Rate per 100,000 workers
Australia	275	3.2	2434
New Zealand	61	3.5	2699
Norway	72	3.2	2446
Denmark	90	3.4	2561
China	73615	10.5	8028
Spain	1177	8.9	6803
Sweden	77	1.9	1469
United Kingdom	225	0.8	632
United States	6821	5.2	3959

Note: An 'accident' is counted if it leads to three days' absence from work.

Source: Queensland Department of Employment and Industrial Relations, 2006; Hamalainen, Takala and Saarela, 2007.

The third question is how will experience rating be administered and whether the administration of compensation and prevention should be kept separate? In New Zealand, the administration of compensation schemes is undertaken by one body (the ACC), while prevention and enforcement of occupational health and safety regulations are undertaken by another (the DoL). However, experience rating conflates compensation with prevention because when an accident occurs, the causes of the accident are addressed at the same time and in the same context as the compensation issues. Moreover, under experience rating there are potential administrative conflicts around the relationship between the employer, the employee and the ACC. That is, will the introduction of experience rating result in a more adversarial compensation administrative process? With experience rating, employers and their injured workers no longer share similar interests. When a worker makes a claim for compensation under experience rating, the employer has an incentive to object on the grounds that injury is not compensable and/or not a work accident. As part of a claims administration process, the employer or someone on his or her behalf may be charged with investigating the injury to determine whether or not the injury was a pre-existing condition (e.g. age-related) or whether or not the accident was work-related (either as a work required motion or the result of non-work activity). While these are questions typically addressed by the ACC when deciding whether to accept a claim, experience rating gives the employer an added incentive to work with ACC to deny the claim. From the workers' perspective, the employer and ACC may appear to be allies.

Fourth, given that experience rating entry criteria is based on an annual levy of \$10,000 or more, small and medium-sized businesses (SMEs), in theory, could be part of the scheme. However, research shows that the high rate of workplace injury and illness in the SME sector is not solely the result of undertaking more hazardous work but primarily because arrangements for preventive health and safety in SMEs are unsatisfactory (Walters, 2001; Tompa and Fang, 2011). The general and multi-faceted lack of resources or as Nichols (1997) states "the structures of vulnerability" that characterise the experience of SMEs for both employers and workers mean that effective management of health and safety performance in these businesses faces considerable challenges. They arise, for example, from the economic precariousness of the business, the organisation and culture of work in the sector as well as low levels of compliance and enforcement Lamm and Walters, 2004). Moreover, SMEs typically operate within complex supply chains in which the relationship between the principle and

subcontractor, and between the head office company and its subsidiary are blurred. The question is, then, how will the experience rating scheme be effectively managed within New Zealand's SME sector?

Finally, as Lippel, et al (2011) and others have begun to expose, there are other inherent issues that have the potential to undermine any potential success of experience rating, namely the rapidly changing nature of New Zealand's employment environment. In particular, both in New Zealand and overseas, the workforce is aging. The number of New Zealanders aged 65 years and over doubled between 1967 and 2001 to 460,000 (StatsNZ, n.d). This number is expected to reach 1,220,000 by 2051. Those aged 75 and over now make up 5.5% of the total population (ibid). The New Zealand Orthopaedic Association noted that the number of surgery requests accepted by ACC between 2010 and 2011 had dropped from 42,500 to 35,000 while some speciality areas had dropped by more than 50% because the injured person did not meet ACC's thresholds to receive treatment in public hospitals (NZ Herald, 2011). More precisely, in 2010, ACC denied about 30% of requests for shoulder and spine surgery, and nearly 20% of knee-surgery requests, citing degeneration (which some have argued is code for "as the result of old age") as the cause of injury and not an accident (ibid, 2011). If this trend of denying claims on the basis of "degeneration" continues, what will this mean for older injured workers employed in firms under both the experience rating programme and the general ACC scheme?

As elsewhere, New Zealand's labour force is becoming increasingly diverse and the types of working arrangements have become more complex and *ipso facto* workers' compensation claims. For example in 2006, New Zealand's migrant population was 927,000 whereby over one-third of the people born overseas had been living in New Zealand for four years or less. (StatsNZ, 2008). New Zealand migrant arrivals exceeded departures (an excess of 172,290) in 2008. In Auckland, New Zealand's largest city, over 60% of the population are now international migrants (ibid). What is not known is the suspected large number of non-documented or illegal migrant workers in New Zealand. Added to this is the rise in the rate of non-standard employment and precariously employed workers, many of whom are new migrants employed in high risk industries such as the primary, construction manufacturing sectors. Many workplaces also are affected by major changes in terms of the introduction of new technology, the emergence of more flexible forms of work organisation, and the on-going intensification of work itself. With the shifting demographics, changes within the workplace and types of work arrangements, one would have expected to see some consideration given to the ability of ACC to effectively manage these changes within the experience rating programme and to set validated experience rating levies.

The introduction of experience rating must also been seen as part of a number of changes to employment law and ACC regulations introduced by the post-2008 National Government. significant employment law change allows employers to discharge any employee without cause during the first 90 days of their employment (Refer to 90-day Probationary Period Clause to the Employment Relations Act). A worker injured in the first few months on a new job can be dismissed without cause (Rasmussen and Anderson, 2010). Also, changes to the Accident Compensation Act, 2001 require that weekly compensation for casual, seasonal and part-time workers who have been off work because of injury for more than five weeks be calculated on the basis of their previous 52 weeks of earnings instead of being calculated on the basis of their weekly earnings at the date of injury. Most seasonal workers will suffer a considerable drop in compensation. Compensation for loss of potential earnings (LoPE) will also reduce from 100% to 80% of the adult 'minimum weekly earnings rate'. Loss of potential earnings is paid to people who have not yet had the opportunity to earn and are incapacitated either before turning 18 or while in full-time study from the age of 18. People already receiving LoPE will remain on the current rate until the amended rate reaches the current rate through increases in the minimum wage. The changes to the Accident Compensation Act, 2001 also make it possible for the employer to reduce their weekly compensation for an employee who leaves their employment and receives holiday pay while also receiving weekly compensation. This, together with a concurrent amendment to the Employment Relations Act, 2000 which allows the employer to deduct expenses from their employee's pay below the threshold of the minimum wage, means that poorly paid injured workers can now be paid below the minimum wage of \$13.00 per hour. These changes reduce the cost of claims but do nothing to improve safety.

Conclusion

The new Experience Rating Programme has only just been implemented, and while employers are reportedly able to access records to establish their 'experience history', there is little public data on how the programme will work and whether it will result in higher or lower levies in the years to come. The National Coalition Government has argued that experience rating will make the levies fairer and provide employers with an incentive to prevent injuries and to get injured workers back to work more quickly. As noted, there is little evidence from overseas that experience rating makes workplaces safer or healthier, so time will tell, perhaps. The Experience Rating Programme may also be expensive to administer as it currently only applies to 1.2% of employers as 49% of businesses will be in the "no claims discount" programme. However, unless serious attempts are made to capture data, it will be difficult, if not impossible, to determine the costs of the programme let alone relate these costs to any putative reduction in numbers of accidents or diseases suffered by New Zealand workers.

Perhaps the problem is that even if experience rating had no impact on workplace safety and health, (either good or bad), the introduction of the experience rating suggests that the ACC is considered as an insurance company. For those who see the ACC as a social programme, experience rating is simply a contradiction. The benefits in terms of cost and social utility of the Woodhouse's social programme model of ACC risk being lost the more the ACC is shaped to fit the insurance model. Furthermore, the debate over experience rating draws attention away from the real question of how best to ensure that all workers enjoy safe and healthy working environments. From the social programme perspective, there is no need for employers, employees, and the workers' compensation agency to be adversaries. That is, experience rating may amplify the tensions around the classification and compensation of work-related injuries and, in turn, further distort work-related injury data.

Finally, since the announcement that New Zealand would have an experience rating programme (Smith, 2010) the country has experienced three major disasters – namely the Pike River Mine Disaster, the Christchurch earthquakes, and the underground explosion in Watercare Services pipeline – with serious loss of life and injury. While there are important lessons for safety to be gained from each one of these incidents, there is no evidence that experience rating would have helped. As with the example of Air New Zealand's serious crash in 1979, not all the fatalities of the three recent disasters were to employees. There are also serious logistical problems in imposing increased levies on firms devastated by the recent events, for example the Pike River firm itself no longer exists. It would be a tragedy for New Zealand to rely on such complex schemes to improve safety while downplaying or ignoring more obvious ways of achieving that end.

Notes

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Appendix 1: Experience Rating 2011

Section 15: Experience rating modification

(1) The Corporation must calculate the experience rating modification using the following formula:

[(rehabilitation component \times 0.75) + (risk management component \times 0.25)] \times off-balance adjustment.

- (2) In the formula in subclause (1),—
- (a) rehabilitation component means the rehabilitation component calculated using the formula in subclauses (4) to (11):
- (b) risk management component means the risk manage- ment component calculated using the formula in sub- clauses (12) to (19):
 - (c) off-balance adjustment means the adjustment that is—
 - (i) required to ensure that the aggregate value of discounts equals the aggregate value of loadings to be applied to section 167(4)(a) levies payable by levy payers in the applicable levy year; and
 - (ii) applied as described in subclause (20).

Weighting for use in calculating rehabilitation component and risk management component

- (3) For the weighting referred to in subclauses (5)(c) and (13)(c), the Corporation must either calculate it using the formulas in paragraphs (a) to (h) or use the weighting in paragraph (i), as follows:
- (a) if the liable earnings of the levy payer in the experience period are \$2,000,000 or less, the weighting is the result of—

¹ In the literature the scheme itself is referred to by the acronym ACC

² The complex set of levies based on 204 separate classes and 700 industrial descriptions, along with the provision for rebates and penalties, proved unworkable and were overhauled in 1979.

³ While there is some difficulty in knowing what labels to use for the two views of the ACC, the most common is 'social insurance' versus 'market-based insurance'. Although Woodhouse described his approach as 'social insurance', the difficulty with this label is that aspects of the Woodhouse proposals involved social assistance and general welfare. In particular, risk of injury by accident was to be shared by the whole community. Furthermore, the label 'social insurance' suggests state involvement in the running of an insurance scheme; however, a state run insurance scheme can emulate privately owned and market-based insurance programmes. The labels 'social programme' and 'market-based insurance' endeavour to make the distinction between the two views very clear.

⁴ The structure and coverage of the classifications are based on the Australian and New Zealand Standard Industrial Classification 2006 (ANZSIC06).

⁵ Liable earnings is the term ACC uses to describe that part of the payroll upon which the work-levy is payable.

⁶ See ACC5404 ACC Partnership Programme information for employers.

⁷ The ACC characterises the "size" of the employer through reference to the amount of the levy paid by the employer (usually over the previous three years).

⁸ It should be noted that to date there are no extant claims data publically available since the change of government in 2008.

 $5\% \times \sqrt{\text{liable earnings}} / \$2,000,000$:

(b) if the liable earnings of the levy payer in the experience period are over \$2,000,000 and equal to or under \$5,000,000, the weighting is the result of—

 $5\% + \{5\% \times \sqrt{\text{ liable earnings}} - \$2,000,000 / \$3,000,000\}$:

(c) if the liable earnings of the levy payer in the experience period are over \$5,000,000 and equal to or under \$10,000,000, the weighting is the result of—

 $10\% + \{5\% \times \sqrt{\text{(liable earnings} - \$5,000,000)} / \$5,000,000\}$:

(d) if the liable earnings of the levy payer in the experience period are over \$10,000,000 and equal to or under \$20,000,000, the weighting is the result of—

 $15\% + \{5\% \times \sqrt{\text{(liable earnings} - \$10,000,000)} / \$10,000,000\}$:

(e) if the liable earnings of the levy payer in the experi- ence period are over \$20,000,000 and equal to or under \$50,000,000, the weighting is the result of—

 $20\% + \{10\% \times \sqrt{\text{(liable earnings} - \$20,000,000)} / \$30,000,000\}$:

(f) if the liable earnings of the levy payer in the experi- ence period are over \$50,000,000 and equal to or under \$100,000,000, the weighting is the result of—

 $30\% + \{10\% \times \sqrt{\text{(liable earnings} - \$50,000,000)} / \$50,000,000\}$:

(g) if the liable earnings of the levy payer in the experi- ence period are over \$100,000,000 and equal to or under \$200,000,000, the weighting is the result of—

 $40\% + \{10\% \times \sqrt{\text{(liable earnings} - \$100,000,000)} / \$100,000,000\}$:

(h) if the liable earnings of the levy payer in the experi- ence period are over \$200,000,000 and equal to or under \$1,350,000,000, the weighting is the result of—

 $50\% + \{50\% \times \sqrt{\text{(liable earnings} - \$200,000,000)} / \$1,150,000,000\}$:

(i) if the liable earnings of the levy payer in the experience period are over \$1,350,000,000, the weighting is 100%.

Rehabilitation component

- (4) The Corporation must calculate the rehabilitation component using the following formula: (payer's rate payers' rate) / payers' rate x weighting
- (5) In the formula in subclause (4),—
- (a) payer's rate means the experience rate of the levy payer for the applicable levy risk group calculated using the formula in subclauses (6) and (7):
- (b) payer's rate means the experience rate of the levy payers in the applicable industry peer group calculated using the formula in subclauses (8) and (9):
 - (c) weighting means the weighting provided by subclause (3).
- (6) The Corporation must calculate the experience rate of the levy payer for the applicable levy risk group using the following formula:

compensation days / earnings.

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