Competition in Personal Injury Insurance

– Past, Present & Future

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1. Introduction

This paper looks at the provision of personal injury insurance and compares competitive underwriting models with monopoly models. The paper has been prepared by drawing on the professional experiences of the authors and their colleagues that between them have:

- worked in key actuarial roles at the Accident Compensation Corporation ("ACC") in New Zealand;
- been involved in the 1999 competitive market for workers compensation in NZ;
- been involved in attempted and successful introductions of competition for personal injury schemes in Australia;
- consulted to the New Zealand Department of Labour for independent quality assurances of the ACC's annual pricing and valuation reviews;
- assisted the ACC's external auditor in forming an audit opinion;
- had the opportunity to work on and observe a number of accident compensation schemes in Australian jurisdictions.

The style of the paper is deliberately informal. We view it as more of a discussion catalyst rather than it making any particular headline statements. We are not presenting a position either in favour of or against a competitive market for personal injury insurance.

It should be noted that this paper has been prepared based on publicly available information and the professional experiences of the authors.

2. Competitive and Monopoly Models

2.1 Monopoly Models

In the monopoly model a single insurer (usually government controlled) provides cover for the whole market. The monopoly insurer takes responsibility for underwriting risks, claims management and investment management.

A good example of the monopoly insurer model is the delivery of accident compensation insurance by the ACC in New Zealand.

2.2 Competitive Models

There are two main options for the delivery of a competitive market in accident insurance, namely:

- ► The fully underwritten model;
- ► The hybrid model.

These two model types are discussed below.

2.2.1 Full Underwriting Model

In the fully underwritten model the participants in the market underwrite the risks that they cover. That is, the market participants determine the premium they will charge for each risk (possibly subject to some regulator imposed constraints) based on their assessment of the likely cost of the claims from the risk.

In addition to underwriting the risks the market participants will, either directly or via third party administrators, provide the claims management for the risks that they accept.

Insurers will also take responsibility for investing the premium income either in-house or via outsourcing to an external funds management company.

Examples of fully underwritten accident insurance models in Australia include:

- ► The Western Australia workers compensation scheme – WorkCover WA;
- ► The Queensland Compulsory Third Party ("CTP") motor accident insurance scheme.

2.2.2 Hybrid Model

In contrast to the fully underwritten model, the hybrid model leaves the underwriting of risks, premium collection and the investment management with a single organisation (e.g. the ACC) with just the claims management being handled by the market participants.

Examples of hybrid accident insurance models in Australia include:

- ► The NSW workers compensation scheme – WorkCover NSW
- ► The Victorian CTP motor accident insurance scheme – TAC

This paper is more focussed on the full competition model. While arguments can be made in favour of hybrid models as a compromise between full competition and state monopoly,

our understanding of hybrid models in Australia is that it can be difficult to provide the right incentives for the third parties managing claims.

We do not consider hybrid models in any detail in this paper.

3. Current New Zealand Scheme

3.1 Background

A Royal Commission chaired by Sir Owen Woodhouse produced a report in 1967 ("the Woodhouse report") that drew on earlier criticisms of the common law systems in New Zealand and abroad (in the 1960's) for the provision of personal injury insurance. It also set out the defining principles for the operation of what we now know as the Accident Compensation Corporation ("ACC") Scheme.

The ACC Scheme was established in New Zealand in 1974 following the Woodhouse report and run as a nationalised monopoly operating a largely Pay As You Go ("PAYG") funding basis until 1999.

From July 1999 to July 2000 the workers compensation Account was briefly opened up to competition (all other Accounts remained with the ACC), operated on a Fully Funded ("FF") basis, before being re-nationalised and also operating a FF basis (as it remains today).

The key features of the ACC scheme, from our perspective, as it stands today are:

- No-fault personal injury insurance cover;
- "24-7" coverage regardless of cause of injury;
- A single nationalised monopoly provider (the Accident Compensation Corporation or ACC) of insurance-like cover across all accounts;
- No right to sue for compensation (i.e. no common law access);
- Only go to court to get access to statutory benefits;
- Statutory benefits:
  - Weekly compensation at 80% of pre-injury earnings (indexing annually and subject to a cap);
  - All medical/hospital and rehabilitation on an "as needed" basis (small excesses apply);
  - Small lump sum benefits (maximum amount indexed annually from a base of $100k) for permanent impairment (non-economic loss);
  - Limited weekly and other benefits for surviving spouses and dependants (which can be commuted); and
  - Access to emergency services (this was not previously opened up to competition).

3.2 ACC Accounts

ACC operates separate "Accounts" for:

- Work (employers and self-employed);
- Non-work for workers ("Earners");
- Non-workers ("Non-Earners");
- Medical malpractice ("Treatment Injury");
- Motor; and
- Work and non-work run off from prior to full funding ("Residual").

There are no asset (or liability) transfers between Accounts (i.e. the Accounts are "silos"). The exception to this is where an act of legislation is passed allowing such a transfer.

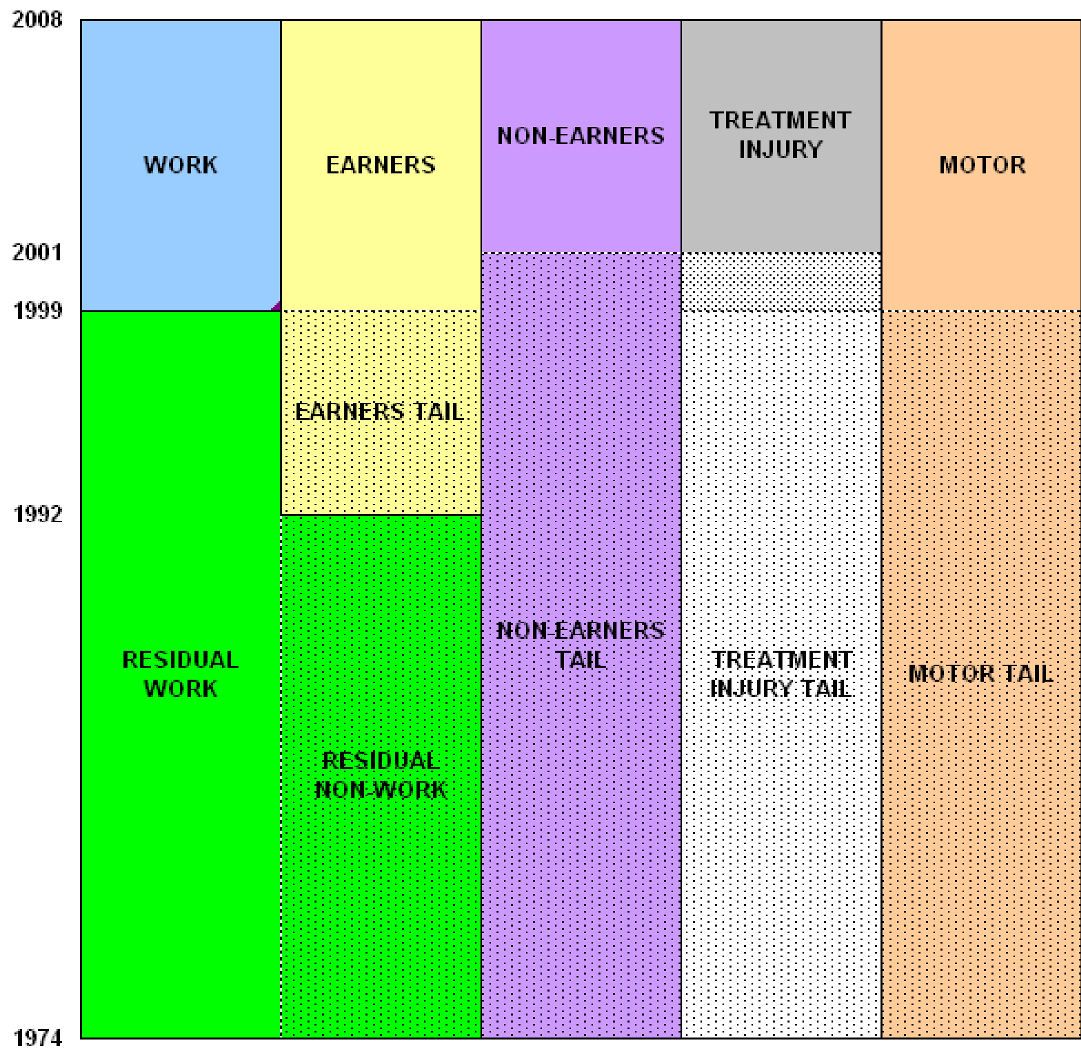
This contrasts with an insurer, whose assets can be "mobilised" to back any liabilities in any class of business. This feature of ACC's funding means they cannot allow for diversification benefits when setting risk margins.

The Account structure is not particularly logical. For example:

- the pre- and post-1999 portions of the Motor Account are not separated;
- the Work Account does not include any pre-1999 work claims;
- the Residual Account contains all pre-1999 work related claims as well as non-work claims for workers prior to 1 April 1992; and
- the Earners account includes all non-work claims made by workers since 1 April 1992.

The following figure shows the breakdown of the Accounts.

Figure 3.1: ACC Accounts



3.3 Funding

The funding policy in most accounts is now targeting Full Funding (previously PAYG) but the funding targets have varied above and below 100% in recent years. Funding horizons have also been varied. The liabilities used in the funding projections include risk margins now required under IFRS.

The funding policy for the Treatment Injury account is a mix of policy for the Earner and Non-Earner Accounts and the funding of Non-Earners is itself a "mixed bag" (with full funding of post-2001 accidents and PAYG for pre-2001 accidents).

There is still a significant unfunded liability (i.e. assets less than liabilities) as a result of the PAYG era from 1974 to 1999. Residual levies/premiums are charged with the intention of covering the funding deficits in the Motor and Residual Accounts by 2014. These Residual levies have been increasing sharply in recent years despite being recast annually with the intention of remaining constant from the date of the recast until 2014.

3.3.1 Common Features of Accounts

The Work, Motor and Earners' Accounts all currently target full funding. That is, the ACC charges levies that are intended to provide for 100% of the ensuing liabilities including risk margin (and the associated expenses of operating the scheme).

The levy rates set by ACC in these Accounts are currently prepared on the basis that any surplus or deficit in the Account, relative to the 100% funding target, is notionally amortised over a period of five years. This is termed the "funding adjustment". The funding adjustment calculations are recast every year to include the immediately previous year of exposure (and the updated claims experience for all prior years) and the effects of investment returns.

The mechanics of the funding adjustment calculation were covered in more detail in the paper Tim co-authored back in 2002 and presented to the NZ Society of Actuaries conference that year[1]. We understand the mechanics of those calculations are little changed, although all of the parameters in the calculation have been changed at least once since then (e.g. funding horizon now five years instead of three years, use of an IFRS derived risk margin (including and excluding diversification discounts) rather than a fixed 15% prudential margin, use of various investment earnings rates and various discount rates for liabilities).

As stated above, these calculations are based directly on the results of the annual independent actuarial valuation of ACC's liabilities in conjunction with a number of assumptions made by the ACC.

3.3.2 Features Unique to Particular Accounts

3.3.2.1 Work Account

Employers who do not self-insure pay a levy that is based predominantly on their annual payroll and the industries they operate in. Various discounts are available, generally for injury prevention and safety initiatives. Employers pay levies on behalf of their employees.

Most self-employed pay levies based on taxable income from their recent tax returns. There are exceptions for newly self-employed, those who have opted for the CoverPlus Extra ("CPX") product and those whose business now generates less income than in the past.

Larger employers who can satisfy ACC that they operate a safe working environment have the option to self-insure, partially or (almost) fully. Self insurers are part of what ACC terms the "Partnership Programme".

Full self insurers must purchase a stop loss cover from the ACC and contribute to the costs of administering the Partnership Programme. Full self insurers are also required to pay ACC to take back any residual liabilities ("buy back") at the end of a claims management period (we understand most often around four years after the original year of exposure).

Partial self insurers receive a discount on the standard levy rates for covering the first two or three years of claim payments but no further payments are required (and stop loss is not compulsory).

The industry groupings are based on the Australian and New Zealand Standard Industrial Classification ("ANZSIC") system of coding business activities. We understand the ACC has largely completed the transition between the 1993 version and the newly released 2006 version of the ANZSIC system. In some cases ACC modifies the ANZSIC business activities for risk rating.

Given the changes in the economy since 1993 in terms of the proliferation of new activities and the "sun-setting" of others, the 2006 version of ANZSIC seems the most relevant going forward. There are well over 500 separate industrial classifications, arranged into 19 major industry groups (A, B, C, … , S).

[1] Pricing the ACC Employer and Self-Employed Accounts – 2002 (Spicer, Jeffery and Pearce).

The ACC risk rates on industry classification. That is, high risk business activities such as horse racing attract a much higher levy rate (currently 6.82% of liable earnings for employees, 8.28% for self-employed) than low risk business activities such as white collar office work (e.g. a General Insurance actuary currently charged at 0.07% of liable earnings if employed, or 0.14% of liable earnings if self-employed).

Risk relativities (based on a 5-year average) are applied to the annually recast average Work levy rate to generate the risk-adjusted levy rate for a given levy rating group (subject to any caps on increases year on year). This calculation therefore includes risk rating of expenses that are not risk related (e.g. levy collection). Hence the very low levy rates for white collar professionals noted above are an example of cross-subsidisation of low risk industries by high risk industries.

Levy rates are expressed as a percentage of liable earnings[2] with the rationale being that higher income earners will receive higher weekly benefits so they pay more than their lower paid counterparts in the same industry business activity.

The Work account is currently deemed to be in surplus with 30 June 2008 assets around 130% of adopted outstanding claims provision including risk margins.

3.3.2.2 Motor Account

Motorists fund motor accidents in two distinct ways:

- a fixed levy when the vehicle is re-licensed (the "window card"); and
- a levy on petrol (currently around 9.3 cents per litre, and 9.9 cents per litre from 1 July 2009).

The key here is that it is the vehicle that is insured via the fixed levy window card, not the driver. This means owners of more than one vehicle must pay for cover on all those vehicles.

There is some variation in the fixed cost according to vehicle type, although it is by no means fully "risk rated" (as is generally intended in the Work Account).

The most notable features of the price variations across different vehicle classes are:

- Non-petrol powered vehicles pay higher window card rates than their petrol powered counterparts (as they do not pay petrol levies);
- Motorcycles over 61cc pay a window card rate of 150% of the standard "sedan" window card rate, partially reflecting higher risk (true costs will be substantially higher);
- Vehicles with low public road usage (e.g. tractors, vintage cars, unregistered vehicles) pay a low window card rate;
- Petrol powered buses, vans and trucks all pay the same window card rate and this is the same as the standard sedan rate;
- Non-petrol powered vehicles pay slightly different window card rates (vans, buses and trucks pay levies around 10% higher than non-petrol sedans);
- Some vehicles pay no window card fee (e.g. fire trucks and ambulances); and

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[2] Min{Actual earnings, indexing annual cap – currently $102,922 per annum}

- Taxis pay the same window card fee as the corresponding private vehicle, making a diesel or LPG powered taxi a particularly attractive option for the taxi owner.

We understand the rationale for the petrol levy is that those (petrol powered) vehicles travelling more kilometres pay a higher overall premium to the ACC.

It is worth noting that any given driver's personal income does not affect the levy/premium they pay for motor cover (as it does for the Work and Earners Accounts). Nor does the driver's experience, level of licensing or driving history.

The Motor Account is significantly under-funded at present. The under-funding relates primarily to the pre-1999 portion of the Account (from the PAYG era) and much of this is in relation to seriously injured claimants (who are relatively more concentrated in the Motor Account).

As at 30 June 2008 the funding ratio for the post-1999 portion of the Account was deemed to be close to fully funded at around 99%. The pre-1999 portion of the Account was deemed significantly underfunded at around 16%.

Clearly, there are many questions that arise from the operation of the Motor Account in a competitive market. Some of these are touched on elsewhere in this paper.

3.3.2.3 Earners' Account

Workers pay for their non-work cover via Pay As You Earn ("PAYE") deductions every payday (or annually for the self-employed).

The premium rate is a constant percentage (currently 1.4% including GST) of liable earnings for all workers (i.e. there is no risk rating). This is set to rise to 1.7% in 2009/10 (and ultimately to almost 2.6% by 2013 according to ACC's own projections disclosed in the Consultation Documents).

The Earner premium includes an allowance for funding part (35% of new claims and 40% of residual claims, see below) of the costs of the Treatment Injury Account (= medical malpractice).

The post-1999 component of the Earners' Account is currently under-funded with a funding ratio of approximately 77%[3], a significant deterioration relative to the deemed funding ratio over the previous 5 year ends.

The pre-1999 portion of the Earners Account was also deemed under-funded at around 80% (64% including the Earners' share of the Treatment Injury account).

3.3.2.4 Treatment Injury Account

The Treatment Injury Account is funded from the Earners and the Non-Earners Accounts. This results in a somewhat unusual funding arrangement. The current funding arrangement as we understand it is as follows:

- 35% of the new claims costs (post 1999 claims) are allocated to the Earners' Account; and

- 40% of the residual claims costs (pre-1999 claims) are allocated to the Earners' Account.

[3] Which makes it very difficult to comprehend the reason for the large negative reserve adjustment in the proposed 2009/10 levy rates.

The remaining claims costs are allocated to the Non-Earners Account which is funded via government appropriations (i.e. from general taxation). It should be noted that the pre-1 July 2001 portion of the Non-Earners Account is still being funded on a PAYG basis.

Medical malpractice cover in Australia is usually paid for by individual treatment providers. In this way the medical practitioners have a greater incentive to manage their own risk.

3.4 Operational Factors

There are a number of operational factors that impact the performance and funding of the ACC Scheme. A few of these are noted below:

- There are currently over 4,000 open claims for seriously (catastrophically) injured claimants receiving benefits from ACC, accumulated over the 34 years of ACC's operation. These claimants are expected to have a life long relationship with ACC. Estimates of the costs of providing care for the catastrophically injured have been escalating in the last few years resulting in the establishment of the National Serious Injury Service ("NSIS") as ACC attempt to control these costs.

- Around 25% - 30% of the wage pool in New Zealand comes from fully or partially self-insured employers. These are employers who have taken up products offered by ACC that allow them to manage their own risks. In exchange for this the employers must submit to workplace safety audits. These employers are still required to contribute to the funding of the Residual Account via the Residual levy.

- The duration of the Scheme is such that there are some claimants that have been receiving benefits for a significant period of time. This includes weekly compensation payments (i.e. the so-called "weekly compensation tail" claims). While significant reductions have been made to the number of these tail claims there are still a large number (approximately 14,000) remaining. These are likely to be the claimants that are more difficult to rehabilitate relative to those that have been removed from the tail to date.

- ACC is heavily invested in the New Zealand debt and equity markets (around 65% of the almost $10 billion total investment assets as at 30 June 2008). The balance is mostly in Australian/overseas equities and overseas debt. This exposes ACC to the risk that a downturn in the New Zealand (and overseas) markets will impact heavily on their investment returns. As poor investment returns are likely to be correlated with a downturn in the economy generally there is a likelihood that ACC's return to work effectiveness will be reduced (resulting in increased claims costs) at the same time as facing poor investment returns.

This list is by no means exhaustive but it does highlight a few of the more significant operational factors.

3.5 Premiums

Levy rates are officially set annually by the Government Minister for ACC. This follows a public consultation period where the levy rates recommended by ACC are released for public comment.

The annual premium income received by ACC for "new" accidents is well over $2.5 billion.

The following comments are based on information contained in ACC's 2009/10 levy consultation documents:

- Risk Premium Plus Expenses ("RPPE") are over $700m annually for the Work Account (excluding partial or full self insurance and residual levies);

- RPPE is almost $500m annually for the Motor Account (excluding residual motor levies); and

- RPPE is over $1,500m annually for the Earners Account.

All of the above quantities look set to rise over the coming years according to ACC's own projections shown in the Consultation Documents.

The reasons the RPPE is considered here rather than ACC's levies are:

- It provides a more meaningful basis for comparison with other Schemes; and

- the post-1999 portions of the various ACC Accounts are currently in varying levels of surplus or deficit and the "funding adjustment" factored into ACC's full levy rates includes a notional amortisation of surplus/deficit over a 5-year time horizon. This can make the interpretation of the levy rate less clear.

The calculation of the RPPE is based on ACC's own projections which in turn are based on the results of ACC's annual independent actuarial valuation of liabilities in conjunction with information from Statistics New Zealand, the Inland Revenue Department ("IRD") and the Land Transport Safety Authority ("LTSA").

3.6 ACC Financial Performance

An examination of the ACC would not be complete without consideration of its financial performance in recent years. Longer term comparisons are less meaningful due to the change from PAYG funding to full funding in 1999 and the switch from "cash accounting" to "accruals accounting" in 2002. Note ACC now report on the NZ IFRS basis although the table below accounts for the risk margin (adopted in the accounts for the first time in 2008) in the 2008 financial year.

The following table sets out the financial results for ACC in each of the last four years as well as in aggregate for the four year period. It also summarises the funding position and the average rate of return received on investment assets.

Table 3.2: Financial Performance of the ACC ($ millions)

	Year Ending 30 June 2005	Year Ending 30 June 2006	Year Ending 30 June 2007	Year Ending 30 June 2008	4 Years Ending 30 June 2008	Key
Levy income	2,736	3,076	3,292	3,654	12,759	(a)
Claims paid in the year	1,937	2,138	2,428	2,728	9,230	(b)
Change in prior year reserves	*880*	*939*	*1,727*	*1,542*	*5,087*	(c)
New claims and economic changes	1,157	382	(706)	721	1,564	(d)
Increase in Risk Margin	0	0	0	2,008	2008	
Changes in the outstanding claims liability estimate	2,037	1,321	1,020	4,271	8,649	(e) = (c) + (d)
Claims incurred	3,974	3,459	3,449	6,999	17,889	(f) = (b) + (e)
Expenses	332	358	379	453	1,521	(g)
Underwriting result	(1,570)	(740)	(535)	(3,798)	(6,652)	(h) = (a) - (f) - (g)
Investment income	777	1,070	802	(2)	2,647	(j)
Insurance result	(793)	330	267	(3,800)	(4,005)	(k) = (h) + (j)
Opening account balance	5,971	7,216	8,877	10,164		(m)
Closing account balance	7,216	8,877	10,164	10,020		(n)
Opening OCL	9,347	11,384	12,715	13,735		(o)
Closing OCL	11,384	12,715	13,735	18,006		(p)
Closing funding ratio[4]	63%	70%	74%	56%		(n) / (p)
Approximate Annual Rate of Return	12.5%	14.2%	8.8%	0.0%		2.(j) / [(m) + (n) - (j)]
Loss ratio	145%	112%	105%	192%	140%	(f) / (a)

[4] Prior to 2008, the funding ratio was based on the central estimate of claim liabilities. If 2008 claim liabilities were also shown at central estimate value the funding ratio would be 63%.

There are a number of points that should be noted in relation to the above table:

- ACC has made underwriting losses in each of the last four years. The underwriting losses for the 4 years ending 30 June 2008 accumulate to $6.652 billion (and an average loss ratio of 140%). Despite strong investment returns in three of the last four years, ACC has also made insurance losses in two of the four years and has made a combined insurance loss of $4.005 billion ($1.997 billion excluding the addition of the risk margin in 2008) over the four year period.

- ACC has already recognised a deficiency in their unearned levy provision as at 30 June 2008 and have an additional unexpired risk reserve of $0.584 billion. This value is not included in the above table as it (arguably) belongs to the 2009 financial year.

- The fact that an additional unexpired risk reserve is required has implications for the robustness of the levy setting process and funding policy applied by ACC.

- The significant levels of the "change in prior year reserves" line item (more than $5 billion for the 4-year period) shows that ACC has been consistently under-estimating claim reserves.

- Before the introduction of a risk margin ACC levies in most accounts targeted a higher level of funding (mostly 15% above central estimate liabilities) than the current risk margin (on average 12.5% above central estimate liabilities) so the inclusion of risk margin addresses the "non-correspondence" between levy income (including risk/prudential margin) and claims liabilities (central estimate) that has existed in the financial accounts historically.

- After apparently improving for three years the funding ratios and loss ratios have deteriorated significantly in 2008 (partially due to the inclusion of the risk margin). In retrospect, the reported funding ratios for 2005, 2006 and 2007 were too high following the delayed recognition of the true levels of liability at the time of the 2008 valuation (as per line item (c)).

- There are three major reasons why the liabilities booked into the financial accounts as at 30 June 2008 are still at significant risk of being understated:

  - The scope of the liability valuation exercise excludes allowance for increases in regulated rates for treatment and rehabilitation in excess of ordinary wage inflation that have not yet been approved by Cabinet, even though those services will be required for claims incurred as at 30 June 2008 at the future going rates. This limitation effectively means the central estimate is lower than a true mean value of the distribution of possible liability outcomes. This assertion is supported by the Department of Labour's ("DoL") actuarial advisers for 2008.
  - The accounting for the liabilities in the Residual Account is "claims made" even though claims are allocated to the Residual Account on a "claims incurred" basis (and there is no other insurer who will assume these liabilities when the claims are reported). Our understanding is that gradual process claims reported in the future (normally called IBNR) will be allocated to the Residual Account (because the injury is deemed to be incurred prior to 1 July 1999) but will not be included in the provision booked at any year end balance date prior to a claim being made/reported. At 30 June 2008 the effect of this accounting treatment was to reduce the booked provision by up to $700m (i.e. $3.1B was booked, but ACC used $3.8B in their Residual Levy calculations). The "claims made" treatment of gradual process claims for accounting purposes (while being allocated to the Residual Account on the basis of when the claim was incurred) was also noted in the 2008 report by the DoL's actuarial advisers.

- The superimposed inflation assumptions adopted in the 2008 valuation basis, particularly for care of the seriously injured, are significantly lower than recent historical experience and so there is still a significant risk that yet further deterioration in the liability estimates will be recognised in the future. In the case of care of the seriously injured, a lot depends on the efficacy of the recently established, but as yet untested, National Serious Injury Service ("NSIS").

While the results vary by Account all Accounts except the Work Account (post-1999 injuries) exhibit performance that is not inconsistent with the whole of Scheme performance.

These last bullets illustrate that while ACC's recent financial performance has been unfavourable (as shown in the above table) in reality it could be significantly more adverse than what is currently recorded in the financial accounts.

4. 1999 Competitive Market

4.1 Overview

From 1 July 1999 to 30 June 2000 the Work Account of the ACC was opened up to competition via a change in the legislation governing accident compensation insurance in New Zealand. This change was reversed in 2000 following a change in government in New Zealand.

The competitive market for workers compensation was based on the full underwriting model. That is, the competitive market insurers handled the setting, collection and investment of premiums as well as the administration and payment of claims.

During the period of competition the basic principles of the Scheme remained the same (e.g. no-fault coverage for all Work accident related injuries) but the ACC was excluded from workplace accident insurance. The exception to this was in relation to the self-employed who were given the option to remain with the ACC, which most did (whether this was due to their relationship with ACC, apathy or the lack of interest in them by insurers (i.e. pricing) is debatable).

A Non-Compliers fund was set up by ACC to cover injured employees where the employer had neglected to purchase accident insurance cover in the competitive market. The level of non-compliance during the competitive market equated to approximately 1% of employers by number or less than 0.1% of the total liable earnings. The fund was set up via a government grant and then funded by penalties on non-complying employers. Should this funding have proved insufficient there were facilities in place to levy the participating insurers.

An Insolvent Insurers fund was also established to cover employees whose insurer had become insolvent. Despite the collapse of HIH it was not necessary to call on this fund.

Following the legislative change passed in April 2000 all workplace accident insurance from 1 July 2000 was returned to ACC (the self-employed were able to return to ACC from 1 April 2000). The competitive market insurers were required to continue the claims management for injuries suffered between 1 July 1999 and 30 June 2000. However, over time ACC has been paid to take back the remaining liabilities from the competitive market insurers and we understand that this process is now complete (except perhaps for one participating insurer).

Although ACC was not allowed to participate in the previous workers compensation competitive market, the government did participate via @Work Insurance ("@Work"). @Work was the default insurer (i.e. every employer was insured with @Work unless they opted to insure with the other competitive market insurers) during this time. The @Work liabilities have been taken back by ACC as well.

The pre 1 July 1999 ACC Work Account was put into run-off at this time as well ("Residual Account"). The management of this Residual Account remains with the ACC.

4.2 Market Participants

During the 1999-2000 competitive market six insurers participated in the workers compensation market in competition with the government insurer, @Work. The six insurers were:

- Allianz New Zealand (then known as MMI);
- Farmers' Mutual Accident Care;
- HIH Workable (subsequently acquired by QBE);
- Ace Insurance New Zealand (then known as Cigna);
- New Zealand Insurance (now part of IAG); and
- Royal & Sun Alliance Accident Insurance (now Vero, known then as Fusion – via a joint venture with Southern Cross and an organisation known as GMV Associates).

Each insurer was obliged to provide a quote to any employer or self-employed requesting a quote. However there were no restrictions on the premium quoted.

4.3 Financial Performance of the Competitive Market

We understand the average premium rate for workers compensation insurance fell by approximately 18% relative to the pre-competition rates charged by ACC.

The premium rates charged by each insurer for each of the 17 different ANZSIC industry groups varied. This variation has been attributed to the variability of the risks within each of the industry groups, the different pricing methodologies adopted by the individual insurers and the strategies adopted by the insurers.

Following the renationalisation of the workers compensation market the ACC average workers compensation premium rates continued to fall. However, looking at the 2009/10 Consultation Documents published by ACC it appears that the premium rates will need to rise to levels similar to those during the year of competition by 2014 (and the ACC rates do not include profit margins).

Claim numbers were falling prior to 30 June 1999. This trend continued during the year that the workers compensation portfolio was open to competition. There has been comment that claims were under-reported during this year either as a result of systems issues or due to pressure from employers that their employees not lodge claims. The other conclusion could be that injury prevention was more effective during this year due to the focus of employers being increased via the arguably more obvious impacts on their premiums. In our view, there is no firm evidence either way. However, it seems reasonable to conclude that claim rates were no worse in the competitive market.

As a consequence of the reduced claim numbers, as well as other possible contributory factors, claim costs also appeared to be lower during the competitive market period. There is limited data on this so it is somewhat difficult to draw conclusions on the true quantum or the reasons for these reductions, although competitive market participants would undoubtedly cite better claims management as one reason.

Anecdotal evidence suggests that, despite the significant set up costs incurred by the insurers that participated in the competitive market, significant profits were realised. While some would debate the sustainability of these levels of profit in the long term the potential for a profitable competitive market to exist does not appear to be disputed.

Further anecdotal evidence suggests that insuring in the competitive market increased employers focus on injury prevention. It appears that the insurers also promoted safer workplaces.

There is very little information on the claims administration abilities of the insurers so, given the brief time during which the competitive market was in place, arguably this was not tested.

Overall it appeared that the competitive market ran in a reasonably orderly manner and that most of the key stakeholders benefitted from it. Some believe that the competitive environment increased ACC's focus on injury prevention and claims management subsequent to re-nationalisation.

4.4 Things that should be improved for next time

We are aware that some aspects of the competitive workers compensation market in 1999/00 did not function as well as hoped.

4.4.1 Who was insured by whom?

It was not clear in all cases which employers/self-employers were insured by which insurance companies. Much of this could be attributed to "shopping around" at the last minute (a number of possible causes including apathy – see also 4.4.3 below) and perhaps also the regulatory structure. This caused a number of problems:

- Insurers clearly wanted to get access to claimants (employees) as soon as possible so that early intervention ensured the best possible return to work outcomes;

- Employees similarly did not know which insurer they were covered by and it was difficult to determine which insurer was providing cover. Often this related to the simple fact that the trading name of their employer and the actual name of their employer were completely unrelated.

It is clear that employers need to finalise their insurance arrangements earlier and clearly communicate to their employees who their workers compensation insurer is in any given year.

4.4.2 Brokers

The government insurer (@Work) may have had issues with understanding how relationships with the broker network (typical for corporate insurances) needed to be managed.

4.4.3 ANZSIC-based earnings data

This may have interacted with the issue in 4.4.1 above. We understand getting a detailed breakdown of an employer's or self-employed's historic earnings by ANZSIC classification unit was very "manual" and labour intensive. It may also have given rise to the situation whereby an insurer offered terms to an employer prior to full validation of earnings which post-validation was either cancelled by the insurer or not taken up by the employer leading to last minute changes of insurer.

Going forward, unless the IRD collects accurate earnings information by ANZSIC classification unit, this will continue to be a problem, as it may be for the ACC (particularly for the self-employed – actual versus budget levy income showed high variance for a number of years and the notes to ACC's accounts attributed this to earnings pool variances).

4.4.4 Credit rating and regulatory assessment of new players

We understand this process was often very slow and therefore a barrier to writing business.

5. Competition in Australian Schemes

The purpose of this section is to give a couple of examples of competitive accident compensation markets in Australia that are of reasonable size and duration and are functioning well (meaning in broad terms they are financially healthy and have affordable premiums).

It is very difficult to meaningfully compare accident compensation schemes across different jurisdictions as there are often quite different benefit structures, different legislation, different mixes of risks and different "cultures". Comparing an "at-fault" scheme with a "no-fault" scheme is particularly problematic.

However, we are not attempting here to "prove that competitive markets are better/cheaper/more efficient etc than nationalised monopolies" (or vice versa). We are simply pointing out that well functioning competitive markets for accident compensation do exist (in Australia) and that with the right legislative and regulatory framework all stakeholders can be well served by such a scheme.

Note that currently there is no motor bodily injury scheme in Australia that is both no-fault first party *and* competitively underwritten. This makes comparison more difficult as the adversarial nature of at-fault schemes and associated legal costs generally leads to higher premiums (and higher benefits). Furthermore, at-fault drivers are not generally covered in these schemes.

5.1 Western Australia Workers Compensation

The current competitive market for Workers Compensation in Western Australia ("WA") dates back to 1981. While this is seven years after the establishment of the ACC there is some evidence to suggest that the WA Scheme is closer to a stable state than the ACC Scheme is.

Currently seven insurers participate in competitive underwriting of workers compensation risks in WA although we understand ten insurers have approval.

The work scheme in WA is essentially a no-fault statutory benefit scheme but has a common law element (i.e. it is still possible for injured workers to sue for additional compensation based on fault).

5.1.1 Premium Rates

In WA, WorkCover WA determines an average premium rate and premium rates by industrial code (ANZSIC) for the scheme. These are termed the gazetted rates. Insurers are then permitted to set their own premium rates at no more than 175% of the gazetted rate (but can seek permission to charge more for some risks). On average, insurers' premium rates are more than 20% less than gazetted rates (22.6% lately).

WA has been experiencing a consistent downward trend in average premium rates (and there is no indication of a reversal of this trend) since 2000 and the gazetted average rate (based on WorkCover WA's own analysis of premium rates) currently sits at around $1.58 per $100 of wages (compared to ACC's long-term view of the NZ average rate of about $1.14 excluding residual levies). If the average discount to gazetted rates (22.6%) applied by insurers is applied to the gazetted average rate ($1.58) the result is an average around $1.22.

WA does not have any unfunded liabilities (unlike the ACC's unfunded pre-1999 work accidents funded by Residual levies which are currently $0.56 per $100 earnings).

However, there are some notable differences between NZ and WA:

- WA has a higher risk mix of industries compared to NZ, primarily due to mining.
- The WA scheme provides overall a higher level of benefits:
  - Weekly compensation is 100% of pre-injury earnings for up to 3 months on benefit and then stepping down to 85% of pre-injury earnings (NZ is a flat 80% of pre-injury earnings subject to the imposed cap);
  - Common law access for any injury with Whole Person Impairment ("WPI") above 15% (capped at around $320k below 25% WPI, unlimited common law for WPI > 25%) – New Zealand has <u>no common law</u> access;
  - More generous death benefits in WA (> $200k lump sum + $8k funeral expense plus weekly compensation to dependants at 12.5% if non-orphaned or 25% if orphaned) versus NZ ($8k lump sum plus $5k funeral expense plus up to 80% of pre-death income for up to 5 years);
  - Other benefits are largely comparable.

We are not in a position to say whether WA or NZ provides better value. What we are saying is that workers compensation in WA appears to be a well functioning competitive market that certainly does not appear to be significantly higher cost on an "apples with apples" basis.

5.1.2 Liability Valuations

WorkCover WA (the regulatory body) use their actuarial advisers to perform an annual outstanding claim liability valuation of the entire WorkCover WA scheme (based on aggregate insurer data submissions which are compulsory and have to meet certain standards). This is then compared with the sum of provisions held by the (seven) participating insurers.

Since 2000 the variation between the scheme aggregate valuation and the sum of insurers' provisions has been (randomly) positive and negative but within a relatively small range (mostly less than 10%).

Individual insurer's results are also analysed.

5.1.3 Financial Performance and Financial Position

As the following table illustrates, the WorkCover WA scheme has consistently shown favourable underwriting results and insurance results year on year.

Table 5.1: WorkCover WA Results

	Accident Year ending 30 June ($m)							
	2003	2004	2005	2006	2007	2008	2002+	2005+
Gross earned premium	587	576	617	702	735	769	4,571	2,823
Paid claims	310	327	308	241	111	112	1,709	772
Outstanding claims	73	111	179	251	479	509	1,646	1,418
Commission	18	17	19	21	22	23	137	85
Other expenses	88	90	99	98	109	114	673	419
Underwriting result	99	31	13	91	14	12	406	129
Investment income	53	57	64	75	82	87	462	308
Insurance result	152	88	77	166	96	98	868	438
Loss ratio	65%	76%	79%	70%	80%	81%	73%	78%
Combined ratio	83%	95%	98%	87%	98%	98%	91%	95%

It should be noted that the 2008 figures in the above table are estimates. It should also be noted that the outstanding claims row does not include claims handling expenses or risk margins.

As at 30 June 2006 the assets held by insurers were 109% of corresponding liabilities[5]. Given the positive insurance results since, the funding ratio is likely to have remained well over 100%.

5.2 Queensland CTP

The competitive market for Compulsory Third Party ("CTP", at-fault motor bodily injury) in Queensland ("QLD") dates back to 2000 under current legislation but has been a compulsory and privately underwritten class since 1916.

Currently six insurers participate in competitive underwriting of CTP risks in QLD. A further eight insurers (past and present) are listed as previously licensed insurers (having run off portfolios).

The Queensland market is similar to the NZ market in terms of the overall number of licensed vehicles (about 3.176 million).

Significantly less publicly available financial information exists for CTP schemes than for workers compensation schemes in Australia.

5.2.1 Premium Rates

Total insurer premium income in Queensland for the 30 June 2007 year was around $1,013m including all charges and levies.

Consequently, average premium rates per licensed vehicle in Queensland in the year ending 30 June 2007 vary slightly by insurer but average around $1,013m/3.176m = $319. This has been trending downwards steadily for a number of years.

There is no scheme deficit or surplus per se as it is competitively underwritten.

[5] Heads of Workers Compensation Authority (2006)

For NZ/ACC, the average total levy per licensed vehicle currently consists of two major components:

- The "tail" levy of $168 (to fund pre-1999 accidents which are currently only around 16% funded according to the ACC's projections); and
- The levy for new accidents (the current year plus amortisation of any surplus/deficit arising since July 1999) of $119 per licensed vehicle (but projected by the ACC to increase to $224 by 2013 before declining to $190 in 2014).

The total average charge to motorists in NZ is set to rise to around $392 by 2013 before declining to $190 in 2014 (according to the ACC's projections in the 2009/10 Consultation Documents). This assumes that the pre-1999 accidents are fully funded by 2014 – there has been some suggestion recently that a 2019 funding horizon might be established to smooth through projected cost increases.

The current financial position of the ACC's Motor Account is a $2.7 billion deficit which equates to a funding ratio of around 47% (c. 99% in respect of post-July 1999 accidents and c. 16% for pre-1999 accidents). These financial statistics are based on ACC's assessments of their financial position (and those of their advisers).

We understand that the QLD CTP regulator provides an average rate and relativities as well as ceilings and floors around those rates within which insurers' premium rates must lie.

However, this information is not publicly available.

5.2.2 Liability Valuations

We have been unable to obtain any information on comparisons of QLD CTP liabilities held by the participating insurers versus a scheme-wide valuation. We understand that this "monitoring" is not done.

We understand this exercise is carried out for the NSW CTP scheme. However, this information is not publicly available.

5.2.3 Financial Performance and Financial Position

We have been unable to find any view of the consolidated financial position of the QLD CTP scheme.

There is nothing to suggest that either the Queensland or NSW CTP schemes are in any kind of financial difficulty.

6. Competition Issues

6.1 Data

Historical claim and exposure data would need to be released by the ACC to the market participants in order for them to develop their products and pricing as well as benchmark and supplement their actuarial valuations of insurance liabilities.

A data release was made at the time of the previous competitive market for workers compensation.

There are always issues around data quality and veracity, with some areas of data being of higher quality (e.g. pure financial), some of lower quality (e.g. injury severity, injury classification) and some of intermediate quality (e.g. industrial classification).

Depending on the degree of summarisation (if any) and the extent of history provided, data releases from the ACC could be very large datasets. It would be difficult to provide a comprehensive description of many data fields or indeed attest to the quality of many data fields.

The ACC regularly releases data to its external actuarial providers for insurance liability valuation purposes and this could form a useful natural starting point. However, significantly more detailed information (e.g. industrial classification, motor vehicle class) would undoubtedly be required if risk based premium rating were to be a possibility.

One issue that could arise with data is a potential ongoing requirement for insurers to submit their claims experience to a central database (maintained and validated by the regulator?). This would help participants whose experience was not credible in its own right and would also be useful in the event a competitive market was re-nationalised following a change in government. Advisers to the regulator could also use this data to perform an independent valuation of the total liabilities in any Account opened up to competition for comparison with participating insurers' provisions (as for WA workers compensation).

The ACC's own experience with the self insuring employers may provide some insights into the key issues with a process of collecting data (and enforcing quality) in this way.

Access to past independent actuarial valuation reports is already available. In theory this should provide sufficient information for market participants to reproduce the ACC liability estimates using the ACC's assumption basis.

6.2 Insurers

Any commercial insurer (or reinsurer) with access to the New Zealand general insurance market and sufficient capital (or reinsurance support) would most likely be interested in a competitive accident compensation market (depending on its structure). With the potential for more than NZ$1 billion in annual premium across the market it will form a significant component of the New Zealand general insurance market.

We would expect there to be an "admission test" and certification for initial and ongoing participation in any competitive market.

During the 1999/00 competitive market there was a requirement that each insurer appoint a "prudential supervisor" to regulate its business. This was in addition to the requirement for a $0.5m deposit with the Public Trust Office and the provision of the recent rating from a recognised rating agency (perhaps the admission test in any future competitive market will need to be a little more stringent!).

The changing regulatory environment for general insurance in New Zealand will need to be considered prior to any change in the way in which accident compensation insurance is delivered. This may remove the need for individual prudential supervisors depending on the final form of the regulation agreed to by the Reserve Bank of New Zealand and the other stakeholders.

6.3 Reinsurers

Reinsurers will probably be required most substantially for quota share support and to a lesser extent for individual excess of loss and other non-proportional cover, including catastrophe, depending on insurer's available capital and any standards enforced around capital position required for participation.

It would also be influenced by the extent of any separate (NZ government-based) management of serious injuries (i.e. very large claims), much like the LTCS for serious motor CTP claims in NSW.

With recent world economic events being what they are, we expect the role of reinsurers will now be crucial in providing a substantial percentage of the capital (principally via quota share) to the market.

6.4 @Work (Mark II)

In the previous workers compensation competitive market, the government participated via @Work Insurance. @Work was the default insurer (that is, every employer and self-employed was insured with @Work unless they opted to insure with the other competitive market insurers, or in the case of the self-employed, remain with ACC).

We expect that insurers will attempt to "cherry pick" the competitive markets, depending on what is offered and/or opened up to competition and/or the extent of any "rules" governing risk selection under the legislation.

This may make any government participant an "insurer of last resort", removing any cross-subsidisation of poorer (unlucky?) risks by better (lucky?) risks that exists under the current conditions.

6.5 ACC

There is undoubtedly a potential ongoing role for the ACC in the competitive market era. The areas of involvement could be:

- Those Accounts, or parts of Accounts, that are not opened up to competition;
- Two generations of run off claim portfolios (pre-1999 claims and any residual claims from 2000 through to the effective date of commencing competition) which still require funding and management; and
- A possible role to play in the operation of a "serious injury scheme" (similar to the Lifetime Care and Support Scheme in NSW). ACC have already established such a facility (the National Serious Injury Service – "NSIS") independent of the potential competitive market (they already have over 4,000 seriously injured claimants on their books).

6.6 Regulation

Given the content of other papers being presented at this conference around regulation we will make only a few summary comments here around regulation of a competitive accident compensation scheme:

- The model of regulation adopted for the previous competitive market for workers compensation could form a useful starting point for regulation in any future competitive market. Changes in the regulatory environment in New Zealand and in overseas jurisdictions may mean that the regulatory model used in 1999/00 needs modification;

- Regulation models used by well-established competitively underwritten schemes in Australia should also be considered (e.g. Workers Compensation in Western Australia and NSW/Queensland CTP schemes – see also Section 5 of this paper); and

- Relevant developments in regulation of insurers generally (e.g. Australia and Europe/Solvency II) should also be considered.

6.7 Account Specific Comments

The following comments relate to the specific ACC Accounts that could potentially be opened up to competition. We have considered:

- The Work Account (employers and self-employed);

- The Motor Account; and

- The Earners' Account.

We do not consider it likely that any of other Accounts would be opened up to competition:

- Treatment Injury (or medical malpractice) is currently funded out of the Earners' and Non-Earners Accounts, not via risk rated premiums on medical practitioners;

- The Non-Earners Account is funded out of general taxation (i.e. ultimately, workers fund all of the ACC Scheme except for any motor vehicles the non-earners pay for out of their own funds); and

- Residual liabilities will remain with ACC (and indeed any outstanding claims in Accounts opened up to competition incurred since 1999 would also be put into run-off).

While a case could be made for introducing competition in the Treatment Injury Account, we believe the probability of this is small and as such we have not considered it here.

6.7.1 Work Account

We suspect that the self-employed and some of the smaller employers do not represent particularly attractive risks for competitive market insurers. This is most likely due to the small inhomogeneous nature of these risks and the relative instability of their earnings. In order to maintain global coverage it may therefore be necessary to establish a default insurer and/or impose controls on the premium rates charged.

The potential for long term claims in workers compensation insurance (admittedly not as much of an issue as for motor) may pose problems for insurers who are not set up or accustomed to handling such claims. The associated capital requirements may also be a barrier to entering into the competitive market. Purchasing reinsurance to guard against the losses associated with large claims may prove cost prohibitive. This is especially true

for dealings with offshore reinsurers who may not appreciate the statutory nature of the benefits offered in New Zealand.

For a competitive market to work effectively there needs to be sufficient incentive and means for insurers to enter the market. This may mean a separate fund is required for the more serious or longer term claims. Alternatively a program to educate reinsurers may be required so that (especially non-proportional) reinsurance premium rates are reflective of the risks being covered.

The promotion of injury prevention initiatives in a competitive market needs to be considered. While the desire to keep premiums down should be a reasonable incentive, monitoring of the reasons for any reductions in claim numbers or costs should be maintained to ensure that the reductions are linked to injury prevention initiatives.

6.7.2 Motor Account

In NSW, the previously 100% at-fault compulsory third party ("CTP") market has been dramatically altered by the implementation of the first party no-fault Lifetime Care and Support Scheme for the catastrophically injured (comparable to the ACC's "seriously injured"). That is, at-fault drivers who are catastrophically injured now have cover under the modified scheme in NSW for treatment and rehabilitation benefits (but they have no loss of earnings cover).

The Lifetime Care and Support Authority ("LTCS") collects levies to fund the scheme and is a State government organisation. This new no-fault sub-scheme removes much of the CTP insurers need for individual excess of loss reinsurance. The remainder of the NSW scheme still operates on an at-fault third party basis at present.

There may be a role for the ACC (the National Serious Injury Service or NSIS), or a new government entity, to play the same or similar role as the LTCS in NSW if the rest of the Motor Account in New Zealand was opened up to competition. Effectively, this would largely substitute for individual excess of loss reinsurance cover. While this is not a consideration that is unique to the Motor Account, almost half of the current serious injuries in the ACC Scheme are in the Motor Account.

There are many other potential considerations associated with opening the Motor Account up to competition. The approaches, experiences and evolution of Australian CTP schemes should provide a good starting point for structuring such a market (e.g. Transition arrangements).

6.7.3 Earners' Account

Effectively, the ACC currently provides for the accident component of Disability Income Insurance ("DII") and also the bodily injury component of any Liability Insurance.

The current arrangements for the Earners' Account are such that there is no risk rating despite the wide range (i.e. everything legal, and some otherwise) of non-work activities covered. We understand that very little extensive and reliable data exists on accident rates and average costs for injuries arising from the different non-work activities.

The Earners' Account has historically provided 55% of the funding of the Treatment Injury account ("medical malpractice") although this has recently been changed to 35% for new claims and 40% for residual claims.

Extensive work would need to be done on the administration and premium rating in order to establish a competitive market to replace the ACC Earners' Account.

6.8 Pricing, Product Design and Underwriting

6.8.1 Work Account

While we are not across the full variety of product offerings in the 1999 competitive market for workers compensation, it seems likely that we would again see some variations from what the ACC currently offers. Should the Motor Account be opened up to competition it is likely that entirely new products would be offered to drivers.

There is currently no underwriting per se for employers – every employer is compelled to seek and is entitled to cover. We understand the only underwriting-like decision is based on the assessment of workplace safety management practices ("WSMP").

In a competitive market, it is unlikely that insurers will want too many options on their offerings to smaller employers and self-employed, but a greater range of options is possible for larger employers.

Some possibilities include:

- Time-based and dollar-based deductibles;
- Discounts for placement of other commercial insurances;
- Agreed value for weekly compensation benefits; and
- Discounts for safety practices.

We are not aware of any regulation in the previous competitive market around premium rate adequacy or caps on profitability but this is a feature of some compensation schemes in other jurisdictions (e.g. NSW CTP).

Initial premium rating would undoubtedly be based on ACC data releases. Subsequently, prices would/could adjust to reflect each insurer's ongoing experience (or the market's experience if a central database was maintained and appropriate market summaries distributed to participating insurers), competitiveness and the market's desire for new product features.

Quota share reinsurers would be "sharing the gains or pains" with their insurance partners and reinsurers will need convincing that the offered rates will, in aggregate, provide a profitable pool of business.

For product offerings in any Account, the quality of the services provided has a price. The lowest premium rate may not necessarily be the best option for an insured, especially if they require a better quality service. Note that in the Work Account (unlike other Accounts), the employer pays for insurance of their employees and so there is a distinction between quality service as provided to employers versus that provided to employees (i.e. claimants).

A notable feature of the previous competitive market for workers compensation was that every insurer had to offer an applicant (i.e. employer or self-employed) terms – but there were no restrictions on those terms, so price offered could be used to discourage the applicant from taking up the offer.

At present, the variety of ACC product offerings are limited for non-self insured employers to:

- a one-week time based excess (paid by employer to claimant) for weekly compensation;

- discounts of 10% to small employers or self-employed if they attend a free industry-specific training course – currently only available to certain industries; and

- for larger non-self-insured employers, discounts of 10%, 15% or 20% following a workplace safety evaluation by the ACC.

There is no experience rating per se permitted under the existing legislation.

Premium rates vary by industry classification. The 2009/10 consultation documents released by the ACC indicate that ACC have now transitioned to the 2006 ANZSIC system and that there are 535 industry classifications for premium rating purposes, arranged into 117 rating groups (i.e. similar classifications can end up in the same rating group and hence be charged the same base premium rate).

It is likely that rating in a competitive market would continue to be on the basis of industry classification. However, there is scope to cast the industry classifications into different rating groups than the 117 set by the ACC.

It needs to be borne in mind that:

- not all industry classifications (or rating groups) are fully or nearly fully credible in the ACC scheme; and

- competition will only serve to sub-divide the experience in the ACC scheme between participating insurers and reduce credibility of the insurer's own claims experience.

6.8.2 Motor Account

The ongoing use of petrol levy as a funding source seems unlikely if the Motor market were opened up to competition. To us, there would be no obvious way of determining how to equitably and reliably distribute petrol levy amongst the participating insurers.

A competitive market would most likely see a return to funding purely by a fixed charge (i.e. a window card). The ACC currently permits more frequent premium renewal than just annual.

A very important feature of a competitive market for Motor would be the existence or otherwise of a "serious injury scheme" akin to the LTCS in NSW. Such a scheme would dramatically reduce reliance on individual event/claim excess of loss reinsurance cover and could probably be delivered at an overall lower cost if managed properly (no capital and/or reinsurance support required).

In an at-fault CTP scheme, motorcyclists are relatively cheap to insure as they don't tend to do much damage to third parties (as the first party in a third party scheme, generally, they are not covered) whereas in a no-fault first party scheme they are more expensive because a significant proportion (40% - 50%) of motorcycle accidents do not involve any other vehicle and many accidents involving other vehicles will be the motorcyclist's fault.

Areas of interest in pricing for a competitive market in place of ACC's Motor Account include:

- Premium rates for motorcyclists – ACC's current rates put them at 150% of the standard sedan/wagon window card rate but their relative fuel economy means they get charged less per kilometre via the petrol levy. True costs of motorcycles in a no-fault first party scheme are undoubtedly far higher (our guess is at least 5 times a standard sedan) yet the relatively small numbers of motorcyclists historically means providing them a heavy cross-subsidy in the current ACC scheme is a small cost to the

collective majority of those individuals insuring their standard sedans/wagons. There is currently no differentiation on price from 61cc upwards or indeed other features (e.g. single cylinder versus multi-cylinder, road bike versus off-road, years of riding experience or rider age);

- Taxis, couriers, trucks, buses etc (i.e. vehicles used for work). These high exposure vehicles are charged the same window card rate as their private use counterparts (petrol levies would probably disappear in a competitive market – as noted above);
- Introduction of rating of vehicles by other factors (vehicle weight, engine size, make, model and age of vehicle, driver attributes such as age, sex, income and driving record, geographic factors);
- Discounts for also purchasing comprehensive motor property cover (and other insurances);
- Insurability of some risks (e.g. young males with poor driving records riding high performance motorcycles);
- Any submission of rates for acceptability (e.g. adequacy, profitability) by the regulator (as occurs in NSW where CTP rates are submitted to the Motor Accidents Authority for approval);
- Any transition arrangements from a largely community rated scheme to a more risk rated scheme;
- Impact of vehicle-based lobby groups (e.g. motorcyclists, taxi drivers);
- Levies for any "serious injury scheme" and for covering emergency and other "special" vehicles (e.g. hearses) and support for any (government?) insurer of last resort;
- Levies to fund the operation of the regulator, the "nominal defendant" fund and any insolvency fund; and
- If no "serious injury scheme" is established then the availability and price of per risk XL reinsurance needs to be considered. This is difficult to price given the high levels of uncertainty around attendant care costs for seriously injured and the lack of any similar cover having ever been purchased by the ACC (although ACC have provided high cost claim cover as an option on their stop loss cover for full self insurers in the Work account).

7. Pros and Cons of a Competitive Market

No paper on competitive markets for accident compensation would be complete without a section on the pros and cons of the competitive market regime versus the nationalised government monopoly regime for accident compensation delivery.

Let's not forget that accident compensation has, in the main, a low-frequency/high average claim cost profile (especially for Motor) and it is also a very long-term class, especially in New Zealand, by virtue of the use of periodic rather than lump sum benefits.

From our perspective, the relative merit of one regime over the other is more of a philosophical or political issue. At the end of the day, each has its advantages and disadvantages and these suit some more than others (and may even suit the same party/person differently at different times).

7.1 Pros of a Nationalised Monopoly

In theory:

- A government monopoly provider should be able to deliver lower expense rates arising from economies of scale and hence could deliver lower premiums, all else being equal.
- A government monopoly does not need a profit loading in premiums and hence could deliver lower premiums, all else being equal.
- A government monopoly has negligible probability of insolvency if it can recover losses in any year(s) out of future premiums (as is possible for ACC). The availability of a government guarantee also reduces the risk of insolvency.
- A government monopoly has a significant influence on the market for medical and rehabilitation services and arguably has a stronger negotiation position in the purchase of such services for its claimants. Similar statements could be made about purchase of reinsurance if it is required (ACC do not currently buy any reinsurance).
- There are no issues about who was providing the cover when an injury arises (or over the source of the injury – i.e. Motor versus Work, or Work versus Non-work etc).
- Cross-subsidies can be implemented with no risk of loss of business or difficulties in obtaining cover.
- No "cherry picking" of risks occurs (every risk is covered).
- Collective provision of injury prevention initiatives.
- A single collective source of data.
- Simplicity.

7.2 Cons of a Nationalised Monopoly

In theory:

- Without competition, there is reduced incentive to provide quality services and operate efficiently which could result in:
  - higher expense rates than could otherwise be achieved (while still maintaining quality claims management);
  - higher claim costs if claims are mismanaged;
  - lower investment returns achieved on assets;
  - poor overall financial management (e.g. sustained underwriting and/or insurance losses with a slow and/or inadequate response via appropriate increases to reserves and levies, giving rise to intergenerational inequity issues);
  - "massaging" of levies and reserves to suit other purposes;
  - lack of innovation on product design and service delivery.
- Without competition, it is difficult to determine what actually constitutes optimal performance from the monopoly provider. There can be no benchmarking within the same jurisdiction.
- The staff employed by the monopoly will inevitably exhibit variation in their day to day performance. A given claimant (or employer for the Work account) who receives bad service (as they define it) from one monopoly insurer staff member may not be able to obtain service from another monopoly insurer staff member (and may be no happier to do so in any case) and has no option to seek service from an alternative insurer.
- Government bodies are notoriously unrealistic about the remuneration required to attract and retain the best staff in various roles, particularly (but not exclusively so) outside of senior management. Quality people may be lost or never attracted to the industry as a result.
- Significant opportunities exist for a government monopoly to retain the services of independent service providers (for a significant fee) for the more contentious tasks it needs to perform or initiate and:
  - skirt or avoid freedom of information obligations; and
  - put pressure on the service providers to conform to the monopoly's wishes on contentious matters and then allege that views formed on such matters were made by independent experts.

  These comments could apply equally to actuarial advisers, auditors or other service providers.
- It may take many years before financial or any other form of mismanagement becomes clearly apparent (the "oil tanker with a small rudder" syndrome). The short-term nature of key appointments within the monopoly means there are risks that the organisation puts a short-term focus on long-term issues, or that a new arrival in a key position inherits a previous role holder's problems and attempts to hide and/or disguise them.

- Groups of risks providing cross-subsidies to other groups generally have no option but to provide the cross-subsidy. This can lead to a total lack of incentive to reduce injury risks. Note that all Accounts except the Work Account have had very poor financial results and are also subject to high levels of cross-subsidisation between risks.

- Much heavier political influence. Politicians' personal agendas can influence policy and decisions relating to the monopoly provider.

- Less incentive for poor risks to improve their safety record.

7.3 Pros of Competitive Market

While it could be said that the pros of competitive market equal the cons of public monopoly, the negation is not quite perfect.

- Consumers do prefer to have a choice. The competitive market was popular with Employers in 1999. Variations in product features allow consumers to customise the best solutions for their own needs. This can include packaging of insurance products.

- Higher quality staff can be attracted into roles that are more highly valued by a competitive insurer or higher quality staff may be attracted into an organisation which has a culture more compatible with their own values. Any flow-on effect into quality products and/or service will be welcome by consumers.

- Strategic alliances between general insurers, health insurers and other specialist service providers may provide a more cost competitive and higher quality service than that occurring in the monopoly scenario.

- Competitive pricing is more likely to lead to premium rates that more accurately reflect the risks being insured.

- There may be greater accountability for the insurers in a competitive market.

7.4 Cons of a Competitive Market

- If an insurer fails then the cost of that failure must be borne somehow – usually by other participants and/or the taxpayer via government assistance.

- An individual insurer may not have the skills or resources to properly manage long-term claims, reducing the number of possible participants.

- In the current economic climate the capital required to write accident compensation business may not be available reducing the number of possible participants.

- It might be difficult for an insurer to economically exit from participation if it cannot find another participant to take over any residual liabilities (and has to manage them off itself).

- It could be argued that supervision of a competitive market is more costly as more opinions have to be accommodated (e.g. multiple views on estimates of outstanding claims liabilities and capital adequacy – although this is arguably not a "con"!).

- Some risks may not be attractive to insurers and as such may not be able to gain cover in a competitive market at an affordable rate. This may give rise to the creation of a default insurer (e.g. similar to the role @Work (employers) and ACC (self-employed) played in the 1999 competitive market) or indeed regulated caps/floors around a "gazetted" rate (cf. WA workers compensation).

A con of both regimes is the instability that could result from frequent moves in and out of a competitive market depending on which political party/parties are in government.

8. Actuarial Issues with Moving to a Competitive Market

Opening any nationalised monopoly accident compensation scheme up to a competitive market will give rise to the consideration of many issues. This is especially true if the competitive accident compensation market will form a significant portion of the general insurance market.

So we ask, from an actuarial perspective, what are some bigger issues needing discussion and debate?

Here are some (by no means exhaustive):

1. The 1999 competitive market for workers compensation only lasted a year which meant a lot of more "long-term" phenomena were largely untested. For example:

   - Should there be a "serious injury scheme" maintained by the government? Is this a better solution than reinsurance? Would reinsurance even be available? (cf LTCS in NSW).

   - Is it appropriate to have a government entity that acts as a "buy back" facility for residual liabilities? Could other participants compete and create a "buy back" market for (non-serious?) injury portfolios?

   - What would be the process for an insurer wishing to exit the competitive market?

   - How would the risk of (and the realisation of) insurer insolvency be catered for?

   - What would be the criteria for continued licensing to compete in this market (e.g. compliance, solvency and service quality measures – see also point 5 below)?

   - Would sufficient cover be available to all risks?

2. Boundary issues. For example:

   - A courier driver takes the company van home (unauthorised?) and has a bad crash at some point outside of work hours. Is it a Motor claim or a Work claim? What if the employer has motor bodily injury cover with insurer A and workers compensation cover with insurer B?

   - A worker develops a condition, perhaps over a number of years, or perhaps at a time which cannot be identified with precision, while his employer(s) take cover from different insurers. What will be the rules around how costs are shared and who will arbitrate/decide if it proves difficult to get agreement?

3. Not many actuaries/insurers have significant experience with this potential market. What difficulties will this create for the market?

4. Who will be responsible for creating and validating a data release and what will the data release include (and at what level of detail)? What "support" will be provided to participants asking questions about that data?

5. Should individual insurer data collected once the market commences be submitted to a central database (in the event that the market is re-nationalised to prevent gaps in history)? Should this be a condition of ongoing participation? Who will validate the data and enforce quality?

6. Will a wider range of product design "options" be allowed? What will be permitted (e.g. higher excesses, lower weekly benefit options)?

7. Will risk rating be allowed in the Motor Account? How much? Will there be any controls/limits on premium rates? Transition arrangements?

8. Will the IRD and LTSA be cooperative with insurers around exposure data provision? What are the likely "teething" problems? Can other models in other jurisdictions be used as a guide (e.g. NSW RTA, MAA and CTP insurers)?

9. Will sufficient capital be available in the competitive market to write accident compensation insurance? Will capital need to be managed via significant levels of reinsurance?

10. What level of regulatory supervision and minimum capital levels would be required in order to ensure that the market runs in an orderly manner? Would the cost of compliance with any regulation become a barrier to entry?

There are many more issues that would also need to be considered. For example, the structure of the competitive market (i.e. the model adopted), legislative requirements, claims management practices, pricing and policyholder protection.

The decision to open a monopoly scheme up to competition is one that needs to be thought through in detail.