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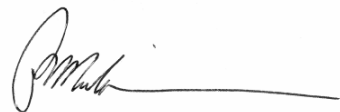
Department of Labour of the Government of New Zealand

Quality Assurance Review of the Accident Compensation Corporation's proposed 2008/09 Levy Rates



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6 November 2007

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1 Executive Summary

1.1 Scope

This report documents Taylor Fry Consulting Actuaries' (TFCA) review of the Accident Compensation Corporation's (ACC's) proposed 2008/09 levy rates for the Work, Earner, Residual and Motor Vehicle accounts. Our review is to assist the Department of Labour in its provision of advice to the Minister for ACC on the levy recommendations made by the ACC board.

1.2 General Statement

Our conclusions are as follows:

- We have reviewed the methods used for setting the levy rates for suitability in the circumstances against current actuarial practice and conclude that they are, for the most part, suitable;
- We have reviewed the assumptions for consistency with available experience and trends and conclude that most of them are consistent or, if not, that there are valid reasons for the assumptions used;
- Exceptions to these two statements are summarised in sections 1.3 and 1.4.

We have divided our recommendations into those which we think need to be implemented as a matter of urgency for current rates (section 1.3) and those which we think can be delayed until the next Levy report (section 1.4). However, we do think that many of our recommendations in section 1.4 are important and we would not like to see them delayed beyond the next report.

1.3 Immediate recommendations relevant to the 2008/09 rates

1.3.1 General

If ACC continues with the approach of charging the risk margin in full on new claims then we think that it would be worth considering phasing it in over a few years rather than implementing it immediately.

We recommend that any changes to the levy rates as the result of the recent discount rate fall be mitigated by taking into account recent asset changes, if any, and that the implications of the remaining levy increases for the funding policy are considered.

1.3.2 Self-Employed rates

In our view, implementation of the proposed Self-Employed rates, when considered in the light of the legislative requirement that levy rates for self-employed people and employers in each industry or risk class are only able to increase or decrease by up to 25% in relation to the previous year's levy rates, will lead to an over-collection of levies from the self-employed.

We recommend that DoL do not accept the current levy rates.

We recommend that ACC reconsider how it manages the transition period and calculates a levy transition schedule which shows the expected transitions of levy rates over the 2008/09 to 2010/11 levy years. Without such a schedule we cannot be confident that the transition to a single account is being appropriately managed.

See section 11.2 for a discussion of these issues.

1.3.3 Motor rates

We recommend that the apparent errors in the tail levy and past claims reserve adjustment for the Motor account be corrected. We anticipate that this will increase the tail levy by \$2 per vehicle and the fully funded levy by \$3 per vehicle although there is scope for these increases to be delayed until a future year. See sections 8.1.1 and 8.1.3.3.

We recommend that all relevant stakeholders note the strong likelihood of further increases in the Motor levy, partly as a result of keeping it artificially low for 2008/09. See sections 9.1.2 and 9.1.3.

1.3.4 Employer rates

We recommend the calculation for the PDP plan discounts be corrected so that the new claims reserve adjustment is spread in proportion to claims costs as is done for the past reserve adjustment. This change will increase the discount for PDP1 Employers from 51% to 59% and should make a similar change for the PDP2 discount. See section 10.1.2.

We recommend that the error we observed in the relativity calculations for the Work account is corrected. This will affect relativities for 12 out of 117 LRGs by more than 5%. See section 11.3.1.

1.4 Recommendations relevant for future Levy reports

1.4.1 Pre-1999 and residual claims

We recommend that the stakeholders should consider developing a mechanism to deal with over or under-funding emerging in the residual accounts after 2014 and the likely volatility in tail levies leading up to 2014. See section 7.7.4.

1.4.2 Disclosure of current and projection levy stability adjustments and funding levels

We recommend that future Levy reports are more transparent in their disclosure of current and likely future levy stability adjustments and the consequences for projected funding levels. See section 9.1.1.

1.4.3 Funding policy

We recommend that ACC document the aims of their funding policy in more detail and show how the mechanism and parameters achieve those aims under various conditions. The contribution of the margins built into the funding targets towards levy stability should also be modeled and the

decision to adopt these margins should be assessed against this contribution. We anticipate that such an analysis may lead to an amendment to the current funding mechanism. See section 7.7.

We recommend that the stakeholders should consider developing a mechanism to deal with over or under-funding emerging in the residual accounts after 2014 and the likely volatility in tail levies leading up to 2014. See section 7.7.4.

We recommend that ACC consider whether the increasing funding plan for the Residual account is necessary or optimal. See section 8.1.2.

1.4.4 Other recommendations

We recommend that ACC review their method of estimating earnings with a view to removing apparent systematic underestimation. See section 5.1.

We recommend that ACC investigate the past under/over-collection of levies to establish whether or not there is any systematic bias. See section 9.3.

2 Background and scope

2.1 Status of report

This report is final and replaces a second draft report issued on 23 October 2007.

2.2 Purpose and background

Taylor Fry Consulting Actuaries (TFCA) have been asked by the New Zealand Department of Labour (DoL) to provide quality assurance of the Accident Compensation Corporation's (ACC's) proposed 2008/09 levy rates for the Work, Earner, Residual and Motor Vehicle accounts. Our review is to assist the DoL in its provision of advice to the Minister for ACC on the levy recommendations made by the ACC board.

Our review is based on ACC's report "Methodology for Setting 2008/09 Levy rates in the Work, Earners', Residual Claims and Motor Vehicle accounts", dated 30 August 2007 (the "Levy Report"). The levy rates have been set by ACC's Actuarial Services team, and the aggregate levy rates have been subject to a technical review by PricewaterhouseCoopers ("PwC"). Following the conclusion of the 2008/09 levy consultation, ACC will recommend final levy rates to the Minister for ACC.

This is the fourth time that TFCA have carried out this review. The previous advice in this respect was provided last year in our report "Quality Assurance Review of the Accident Compensation Corporation's proposed 2008/09 Levy Rates", by Richard Brookes, dated 11 October 2006 (the previous TFCA report).

We have also reviewed the valuation of the ACC scheme at 30 June 2007, the results of which underlie the Levy Report. Our report documenting the results of that review is "Review of the Accident Compensation Corporation 2007 Year End Estimate of Outstanding Claims Liability and Liability Projections Underlying the 2007 DEFU" (the TFCA Valuation Review), dated 14 October 2007.

2.3 Scope

The scope of our review is set out in a contract between TFCA and the DoL (unsigned at the date of this draft report). The relevant part of that contract states that the scope of the review is:

- "A review of the actuarial methodology and its suitability for the portfolio, data and benefit structure for which it is being used;
- A review of the suitability of the main actuarial assumptions (in terms of financial significance) with respect to recent experience implied by the data;
- A spot check of parts of the valuation calculations to ensure that they have been correctly executed is included;
- A review of the appropriateness of economic and discount rate assumptions;

- Any recommendations of improvement to any area of the process or information are provided; and
- To exclude any independent evaluation of the data; we do not wish to purchase a full independent calculation, or an exhaustive check of all the calculations being reviewed.”

The contract goes on to specify that the review will cover “*the levies proposed by ACC for the Residual Claims Account, Work Account (including the discounts and stop-loss/high-Cost-Claim-Cover levies for the partnership programme employers also including Coverplus and Coverplus Extra), Earners’ Account, and Motor Vehicle Account*”, including:

- “The sustainability of the proposed levies;
- The application of any margins included in the calculation of the levy rates taking into account the reserving position of each Account and the Boards approved reserving policy; and
- The relativities between the levy risk groups in the Work Account.”

2.4 Addressee of report

This report was commissioned by Andrew Marshall of the DoL and is addressed to the DoL. DoL have informed us that this report will be available to the general public via the DoL and ACC websites. We draw the attention of all parties other than TFCA and DoL to the comments regarding third parties given in section 2.5.

2.5 Reliances and limitations

This report is being provided to the addressees for the purposes outlined in section 2.4. It is not intended, nor necessarily suitable for any other purpose.

Third parties should place no reliance on this report that would create any duty or liability by TFCA to the third party.

We have prepared this report in conformity with its intended use by persons technically familiar with the areas addressed and for the stated purposes only. Judgements about the conclusions drawn in this report should be made only after considering the report in its entirety.

Finally, in undertaking this review, we have relied upon the accuracy of information supplied by the parties as outlined in section 3. We have used the information without independent verification. It has been reviewed where possible for reasonableness and consistency.

3 Information supplied

This section describes the data supplied to us from various sources:

- ACC's draft Levy Report dated 30 August 2007 and appendices, supplied by Gavin Pearce of ACC;
- Various spreadsheets supporting the Levy Report, also supplied by Sandra Chapman of ACC;
- PwC's letter detailing the results of their technical review of overall levy rates, supplied by David Gifford of PwC;
- PwC's letter detailing the new method for setting risk relativities in the work account, supplied by Gavin Pearce of ACC;
- ACC's bad debt provision report as at 30/4/2007 provided by Sandra Chapman of ACC;
- A paper discussing the removal of the CPX age related discount along with supporting analysis provided by Sandra Chapman of ACC; and
- A copy of the final Amendment Bill relating to the Injury Prevention, Rehabilitation, and Compensation Act provided by Andrew Marshall of DoL.

We have received the full cooperation of all the parties named in this section and received all the information that we requested.

4 Reconciliation of movements in Levy Rates

4.1 Changes in assumptions

There are a number of significant changes in the levy rate calculations this year. The effects of these are discussed in the Levy report (with some notable exceptions – we highlight these in section 9.1.1). However, they are not presented in a single section of the Levy report, with the result that it is difficult for the reader to appreciate the contributions of each change to the final levies. We collect the effects of the changes in the tables below and go on to use the tables to structure our discussion of this year's levy rates.

Table 4-1 shows each component of the levies, for both the current rates and the 2008/09 consultation rates.

Table 4-1 Current and 2008/09 consultation levies by component

Period	Consultation 2008/09			Current		
	Work	Earners	Motor vehicle	Work	Earners	Motor vehicle
Fully funded claims						
Exposure						
Liabe Earnings (\$M)	66,109	84,486		60,482	77,012	
Number of earners		2,152,664			2,082,000	
Number of vehicles			3,178,820			3,086,275
Frequency of entitlement claims	0.52	3.17%	0.25%	0.59	2.90%	0.24%
Number of entitlement claims	34,231	68,235	7,789	35,427	60,318	7,420
Risk cost per entitlement claim						
Weekly Compensation - Non Fatal	\$8,295	\$5,426	\$12,102	\$6,929	\$5,159	\$11,028
Weekly Compensation - Fatals	\$271	\$329	\$2,719	\$200	\$228	\$2,578
Independence Allowance	\$1	\$31	\$0	\$0	\$0	\$0
Lump Sum	\$316	\$179	\$1,988	\$302	\$196	\$1,951
Hospital Rehabilitation	\$1,262	\$1,609	\$1,928	\$1,096	\$1,422	\$1,601
Other Rehabilitation	\$358	\$470	\$2,632	\$217	\$286	\$1,857
Vocational Rehabilitation	\$531	\$317	\$844	\$651	\$383	\$1,000
Social Rehabilitation Serious Injury	\$302	\$565	\$12,678	\$317	\$480	\$9,702
Social Rehabilitation - Non Serious Injury	\$305	\$321	\$2,599	\$522	\$323	\$2,614
Medical	\$2,566	\$3,356	\$3,579	\$2,845	\$3,305	\$3,485
Ambulance and bulk billed	\$670	\$1,078	\$7,477	\$729	\$1,194	\$8,372
Total risk cost per entitlement claim	\$14,877	\$13,682	\$48,544	\$13,807	\$12,975	\$44,189
Treatment injury account funding		\$884			\$793	
Expenses	\$2,889	\$2,410	\$5,791	\$3,828	\$2,387	\$6,061
Total cost per entitlement claim (incl expenses)	\$17,766	\$16,976	\$54,336	\$17,636	\$16,155	\$50,250
Rate (incl expenses, per vehicle for Motor, \$ per \$100 of liable earnings other accounts)	\$0.92%	\$1.37%	\$133.14	\$1.03%	\$1.27%	\$120.81
Adjustments (per vehicle for Motor, \$ per \$100 of liable earnings other accounts)						
Funding adjustments						
Past claims	-\$0.35%	-\$0.10%	-\$25.03	-\$0.30%	-\$0.12%	-\$29.77
New claims	\$0.09%	\$0.13%	\$14.69	\$0.03%	\$0.02%	\$4.74
Bad debt loading	\$0.01%	\$0.00%	\$0.00	\$0.01%	\$0.00%	\$0.00
WSMP loading	\$0.02%			\$0.03%		
Levy rate (per vehicle for Motor, \$ per \$100 of liable earnings other accounts)	\$0.69%	\$1.40%	\$122.81	\$0.79%	\$1.17%	\$95.78
Pre 1999 claims						
Gradual process	\$0.04%			\$0.04%		
Other	\$0.43%	\$0.00%	\$144.63	\$0.39%	-\$0.02%	\$109.00
Total	\$0.47%	\$0.00%	\$144.63	\$0.43%	-\$0.02%	\$109.00
Stability adjustment	\$0.09%	-\$0.18%	-\$12.81	\$0.10%	\$0.02%	
Round to nearest \$0.10		\$0.02%			-\$0.02%	
Consultation levy rate	\$1.25%	\$1.24%	\$254.63	\$1.33%	\$1.16%	\$204.78

An examination of Table 4-1 shows that:

- There have been substantial increases to the estimates of liable earnings in the Work and Earners' accounts;
- There has been a significant decrease in the estimated entitlement claim frequency for the Work account and a significant increase for the Earner's account. We discuss this in section 5;
- Total risk costs per entitlement claim have increased modestly for the Work and Earners' accounts and rather more so for the Motor account. We discuss this in section 6.1;
- The expense allowance has decreased for the Work Account. We discuss this in section 6.3;
- There has been a large increase in the Funding adjustments for new claims in all accounts. We discuss this in section 8.1.4;
- There has been a large increase in the levy required for pre-1999 claims in the Residual claims account (shown under Work account in the table) and a very large increase in the levy required for pre-1999 claim in the Motor account. We discuss this in section 8.1.1;
- There are significant adjustments for 'Levy stability', particularly for the Earners' account although they are not shown as such in the Levy report. We discuss this in section 9.1.

4.2 Impact of changes of assumptions

4.2.1 Summary

We show in Table 4-2 below the impact on the final levy rate of the changes outlined above.

Table 4-2 Impact of changes on final levy rate by component

Period Account	Impact of change on final rate		
	Work	Earners	Motor vehicle
Liable Earnings	-9%	-10%	
Number of vehicles			2%
Number of entitlement claims	-3%	14%	3%
Risk cost per entitlement claim			
Weekly Compensation - Non Fatal	6%	2%	1%
Weekly Compensation - Fatals	0%	1%	0%
Independence Allowance	0%	0%	0%
Lump Sum	0%	0%	0%
Hospital Rehabilitation	1%	1%	0%
Other Rehabilitation	1%	1%	1%
Vocational Rehabilitation	-1%	0%	0%
Social Rehabilitation Serious Injury	0%	1%	3%
Social Rehabilitation - Non Serious Injury	-1%	0%	0%
Medical	-1%	0%	0%
Ambulance and bulk billed	0%	-1%	-1%
Total risk cost per entitlement claim	5%	5%	5%
Treatment injury account funding	0%	1%	0%
Expenses	-4%	0%	0%
Total cost per entitlement claim (incl expenses)	1%	6%	5%
Adjustments			
Funding adjustments			
Past claims	-3%	2%	2%
New claims	5%	9%	5%
Bad debt loading	0%	0%	0%
WSMP loading	-1%	0%	0%
Total adjustments	1%	10%	7%
Gradual process	0%		
Other	3%	2%	17%
Total pre 1999 claims	3%	2%	17%
Miscellaneous			
Stability adjustment	-1%	-17%	-6%
Round to nearest \$0.10	0%	3%	0%
Rounding	3%	-1%	-3%
Consultation levy rate	-6%	8%	24%

Table 4-2 shows some dramatic impacts of the various changes. Sometimes they are offsetting, sometimes not. In particular, we see that the changes in the levy rates, if not for the impact of the 'Levy stability' adjustments would have been:

- A drop of 13% for the Work account;
- An increase of 23% for the Earners account;
- An increase of 30% for the Motor account.

The 'Levy stability' adjustments smooth these changes so that the final recommended changes are:

- A drop of 6% for the Work account;
- An increase of 8% for the Earners account;
- An increase of 24% for the Motor account.

We discuss the impacts briefly by account.

4.2.2 *Work account*

Projected liable earnings have increased significantly which acts to decrease the final levy rate by around 9%. Although not part of our scope, we note that if, as we believe to be the case, the projected earnings for previous years have been underestimated then there has likely been an over-collection of levies for this account.

The number of entitlement claims has dropped and the total cost per entitlement claim has increased. The combined impact on the final levy rate is a decrease of 2%.

The change to full funding adjustment for past claims has acted to decrease the levy rate by a further 11%. This is partly offset by an increase to the funding adjustment for new fully funded claims and levy for pre 1999 claims which have increased the levy by 5% and 3% respectively.

Finally, a 'stability adjustment' of a similar level to that used last year has been made to the levy rate in order to smooth out future expected increases.

The overall picture is of most factors acting to reduce the levy rate substantially, these being offset by a large increase to fund the risk margin and a levy stability adjustment.

4.2.3 *Earners' account*

As with the Work account, projected liable earnings have increased significantly which acts to decrease the final levy rate by around 10%. Although not part of our scope, we note that if, as we believe to be the case, the projected earnings for previous years have been underestimated then there has likely been an over-collection of levies for this account.

There have been large increases to the projected number of entitlement claims and the cost per entitlement claim. These have a combined upward impact on the final levy rate of 20%. The funding adjustments add a further 10%.

There is a significant 'levy stability' adjustment of minus 15%.

The overall picture is of increases of 30% which are offset by an increase in the estimate of liable earnings of 10% and the levy stability adjustment of minus 15%.

4.2.4 Motor account

There has been a modest increase in the number of vehicles, the impact of which is almost exactly offset by an increase in the number of entitlement claims.

The cost per entitlement claim has increased the levy rate by 5% and the funding adjustments on the fully funded claims have added a further 7%.

The major increase is due to an increase in the levy for the pre 1999 claims which adds 17% to the levy rate. This has been partially offset by a 'levy stability adjustment' which reduces the levy by 6%.

5 Exposure and number of entitlement claims

5.1 Exposure

5.1.1 Method

In order to project the base unit of cost for each account (termed 'exposure') For the Motor account this is the number of licensed vehicles. We have reviewed this projection and in our opinion it is reasonable.

For the other accounts, ACC project the number of people eligible for cover under each account as follows:

- They start with a projection of the population, based on projections from Statistics New Zealand;
- Then a worker participation rate is projected. Multiplying this by the population gives the expected working population;
- Subtracting the working population from the total population gives the projected number of people covered by the Non-earners account;
- Projections of the number of workers covered by the Partnership Plan are calculated by increasing the current number by the increase in the working population. Subtracting these from the working population gives the number of workers covered by the Work account;
- The current average earnings per worker for the Work and Earners accounts are calculated by dividing the current liable earnings for each account by the number of workers covered by that account;
- Future liable earnings for each account are calculated by increasing the average earnings per worker for expected increases in the Labour Cost Index (LCI) and multiplying this by the expected number of workers covered by each account.

We have reviewed these projections and in our opinion they are reasonable.

5.1.2 Changes from previous Levy report

The projections of future liable earnings for the Work and Earners' accounts have risen from the previous levy calculations by approximately 10%. Table 4-2 shows that this has decreased the levy rates by the same rate. In normal circumstances, one would expect a rise in earnings by LCI inflation plus some modest population growth. So the figure of 10% seems anomalous. There are two reasons for the high earnings growth.

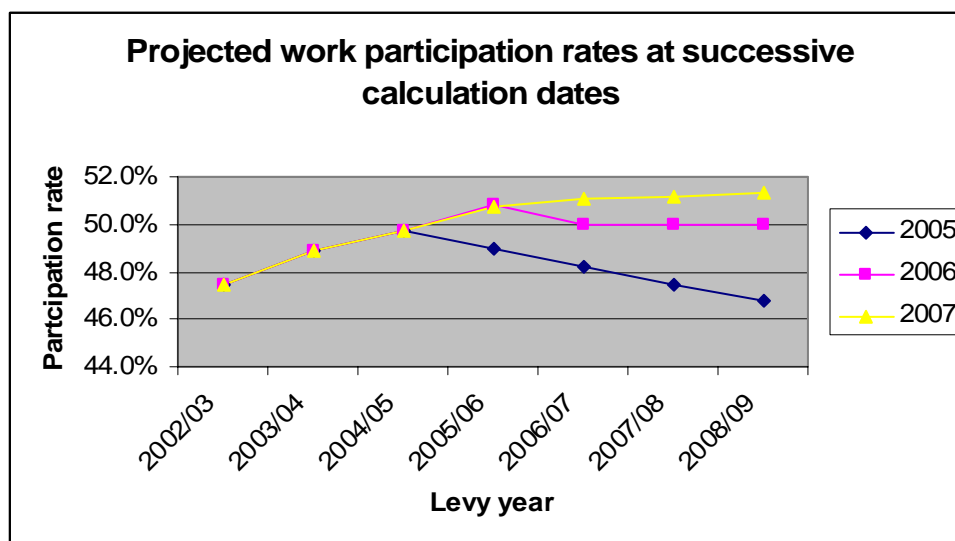
First, there has been an underestimate in the projected effective average earnings per worker. This is shown in Table 5-1 below:

Table 5-1 Successive estimates of Average Earnings per worker

Levy year	Working population				
	Average earnings (\$)			Change from previous year	
	2005	2006	2007	2006	2007
2005/06	\$26,964	\$27,592	\$28,339	2%	3%
2006/07	\$27,726	\$28,301	\$29,220	2%	3%
2007/08	\$28,476	\$29,050	\$30,008	2%	3%
2008/09	\$29,142	\$29,822	\$30,710	2%	3%

The years across the table are successive Levy reports. The years down the left hand column are years of earnings to 31 March. The table shows that there was a general increase the estimates of effective Average Earnings (over and above projected inflation) of 2% from the 2005 Levy report to the 2006 Levy report and a further 3% this year. We have not analysed the cause of these increases but suggest that ACC do so with a view to minimising them in the future.

The second reason for the anomalous projected liable earnings increases is that there has been a change in the projected worker participation rate. This is the second successive change, as shown in Figure 5-1 below.

Figure 5-1 Assumed and actual worker participation rates

We are comfortable with the assumed work participation rate in this report and consider it to be a considerable improvement on the assumptions made in the previous two reports.

5.2 Numbers of entitlement claims

The risk costs used for the levy calculation come from PwC's projected future costs as calculated in their 30 June 2007 valuation. We explore the risk costs in the next section but note that the implication is that the projected numbers of entitlement claims do not directly affect the calculation but are used for presentational purposes to show the projected risk costs per entitlement claim. For instance, if the projected number of

entitlement claims is increased but the total risk cost remains constant then the presented risk cost per entitlement claim will fall.

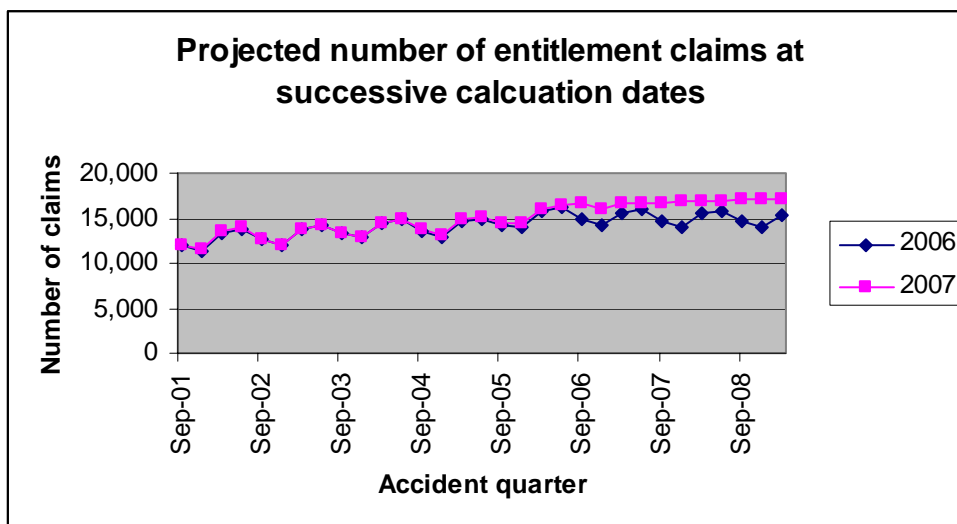
For this report, the projected numbers of entitlement claims for the Work and Earners accounts have changed significantly from the previous Levy report, as shown by Table 5-2 below:

Table 5-2 Increase in projected number of entitlement claims since previous Levy report

Entitlement claims			
Consultation			
Account	2008/09	Current	Change
Work	34,231	35,427	-3%
Earners	68,235	60,318	13%
Motor	7,789	7,420	5%

In normal circumstances, one would expect a modest increase in the number of entitlement claims, in line with the growth of the underlying population. For instance, the number of licensed vehicles has increased by 3% over the last year which is in line with the increase in the number of entitlement claims in the Motor account. The fall in the number of claims for the Work account seems a little unusual in the light of the increase in the projected number of workers but we have not investigated it further. The increase for the Earners' account is due to a decision for this Levy report to recognise an increasing trend in past numbers. We show the projections for this report and the previous report in Figure 5-2 below:

Figure 5-2 Projected entitlement claims in the Earners' account



We are comfortable with the new assumption and believe that it is consistent with the increase in risk cost adopted by PwC in their valuation as at 30 June 2007 as we discuss in the next section of this report.

5.3 Recommendations

We recommend that ACC review their method of estimating earnings with a view to removing apparent systematic underestimation.

6 Risk costs, levy receipt timing and expenses

6.1 Risk costs

The risk costs come directly from PwC's valuation as at 30 June 2007. If the valuation assumptions were unchanged and there were no superimposed inflation assumptions, one would expect the risk costs to increase by inflation each year. There were three major changes to the 2007 valuation from the 2006 valuation:

- The risk free discount rate was raised from 5.83% to 6.61%. In normal circumstances this would be expected to significantly lower the risk cost. In fact, the Levy report does not use the risk free discount rate to discount the risk cost so this change has had no effect. We cover this subject in more detail in section 7.3;
- The superimposed inflation allowance for Social Rehabilitation - Serious Injury was increased considerably. The effects of this increase can be seen in Table 4-2 which shows the 3% impact on the final levy for the Motor Account from the increase in the risk cost for this payment type;
- The risk costs for future accident periods for the weekly non-fatal payment type were significantly increased, due to the emergence of more claims, lasting for longer periods. The effects of this increase can be seen in Table 4-2 which shows the impact on the final levy the increase in the risk cost for this payment type to be 6%, 2% and 1% for the Work, Earners and Motor accounts respectively.

There have also been some minor changes in other areas, with the result that the increase in risk costs has increased the final levy rates by 5% for each account, as shown in Table 4-2.

We have verified that the risk costs used for the levy calculations are sourced from the PwC valuation.

6.2 Assumed average timing of levy receipt

The assumed average timings of levy receipt, by account, are as follows

- 31 August of levy year for Employers
- 30 November of levy year for Self-employed
- 30 September of levy year for Earners

These accounts all have a 31 March levy year end.

The assumption for the Earner account appears reasonable to us because employees pay earner levies continuously, and more or less uniformly, throughout the year via deductions from salary/wages. We have received premium collection data justifying the assumptions for the other accounts.

6.3 Expenses

The claims handling expenses also come directly from PwC's 30 June 2007 valuation. For that valuation they adopted a new approach to modelling

claims handling expenses which resulted in a different allocation of expenses across accounts and claim durations. The effects of this can be seen in the fall in assumed expenses for the Work account. Table 4-2 shows the impact of this fall to be a 4% reduction in the final levy rate for this account.

7 Funding policy and mechanism

7.1 Funding principles

The Levy Report states that ACC's funding policy has two main principles:

- Financial sustainability in the long term; and
- Levy setting, having regard to
 - ✓ Levy stability
 - ✓ Forecast uncertainty
 - ✓ The provision of incentives for injury prevention
 - ✓ Equity considerations.

This is a change from previous reports in which the principles were stated to be:

- To manage levy stability over time;
- To ensure that the ACC account has enough funds.

We are not sure whether or not the reported change of principles has had or will have any eventual effect on the actual funding mechanism. This year ACC has adopted the same funding mechanism as in previous years. This mechanism is dependent on various funding parameters. Although the mechanism has been the same for a number of years, the parameters have changed markedly over time and they have changed again this year. We discuss these issues below.

7.2 Funding mechanism

The mechanism by which ACC achieves its aims is via the price charged for the next year of claims (i.e. claim cost) and the reserve adjustments. There are three reserve adjustments:

- Reserve adjustment for new claims
- Reserve adjustment for past claims
- Residual or tail levy adjustments

Simplified descriptions of these elements are given below.

7.2.1 Claim cost

The claim cost is based on the projected cost of claims for the accident period covered by the levy, based on the estimates of the made by ACC's external actuaries, PwC, subject to one potential adjustment; the discount rate may be different to the risk-free rate used by PwC.

7.2.2 Reserve adjustment for new claims

The claim cost in respect of just the 2008/09 levy year is run off for x years (we discuss the value of x in section 7.3 below) and a margin applied to the remaining liability.

The liability plus margin is then discounted using the rate referred to in section 7.2.1 to the assumed average date of levy receipt for the 2008/09 year.

In effect, the 2008/09 levy is loaded with a reserve adjustment for new claims which aims to ensure that the total levy is sufficient to fund the claim cost plus the required margin at the end of x years.

7.2.3 Reserve adjustment for past claims

The balance sheet is first projected to the end of the current levy year and then further projected over the next x years by considering:

- Initial assets and claim liabilities at the end of the 2006/07 year. The claim liabilities are based on the estimates of the made by ACC's external actuaries, PwC, subject to one potential adjustment; the discount rate may be different to the risk-free rate used by PwC;
- Inflows from investment income on assets and net cash flows calculated using the assumed rate of return on the assets; and
- Outflows equal to expected claim payments and claims related expenses in respect of all claims incurred between 1 July 1999 and the end of the levy year.

The fund is assumed to be closed to new claims one day prior to the start of the new levy year. The reserve adjustment for past claims is then calculated as the additional amount required to be added to (or subtracted from) the above outflows and inflows for each of the next x years so that, at the end of x years, the assets are equal to the discounted liabilities including the margin.

7.2.4 Residual or tail levy adjustments

A similar calculation to that in section 7.2.3 is carried out for the pre-1999 accounts but focused on meeting the funding target in 2014.

7.3 Key parameters

There are four key components, or parameters, which will influence the funding target over the funding horizon. These are:

- The funding horizon, x years;
- The margins applied in both the new claims and past claims reserve adjustments;
- The discount rate used to discount the claim cost cash flows and the liabilities in the reserve adjustment calculations; and
- The assumed rate of return on the assets in the fund.

Different choices of funding parameters will result in different levy rates and expected long term funding positions for the accounts. The funding position is normally expressed as the value of the assets divided by an estimate of the liabilities. There are at least three possible definitions of liabilities, resulting on three different interpretations of the term "funding position":

-
- The expected future costs of existing claims, excluding any margin, discounted at the risk free rate;
 - The liability as disclosed on the ACC balance sheet; and
 - The expected future costs of existing claims, discounted at the assumed investment return on assets in the fund.

7.4 Changes since the previous Levy report

The funding parameters have been changed again for this year:

- The discount rate used for past claims has been switched from the expected earning rate on the assets to the risk free rate (although the rate used for new claims remains at the expected earning rate on the assets);
- The risk margin is now account specific;
- The expected rate of return on the assets has been changed from 6.75% pa for all years to 7.7% for the first year, 7.3% for the next year and 6.75% pa for subsequent years;
- The funding horizon for the new claim funding adjustment is now zero i.e. the risk margin is funded immediately.

Before examining the effects of the latest changes, we note that there have been significant changes to the funding parameters in each of the last 3 years.

7.5 A history of the funding parameters

The parameters adopted for the levy rate calculations since 1999 are:

Table 7-1 History of funding parameters

Funding parameters	Levy year			
	2005/06 and previous	2006/07	2007/08	2008/09
Funding horizon				
Past fully funded claims	3 years	5 years	5 years	5 years
Pre 1999 claims	2014	2014	2014	2014
New claims	3 years	5 years	5 years	zero
Rate of return on assets	6.75%	6.75%	6.75%	7.7/7.3/6.75%
Risk free rate	6.50%	5.75%	5.83%	6.61%
Discount rate				
Past claims	6.50%	6.75%	6.75%	6.61%
New claims	6.50%	6.75%	6.75%	7.7/7.3/6.75%
Margins				
Prudential				
Fully funded	15%	10%	0%	0%
Pre 1999	15%	15%	5%	5%
Risk	0%	0%	11%	11% (different across accounts)

The major changes have been:

- For the 2006/07 levies
 - ✓ A change in the funding horizons for new and past claims from 3 to 5 years. For over-funded accounts this acted to increase the levy rates and vice versa for under-funded accounts
 - ✓ A change in the discount rate used from a risk free rate to an expected rate of return on assets. This decreased the levy rates significantly since the risk free rate was 1% pa less than the expected return on the assets
 - ✓ A reduction in the prudential margin for fully funded claims from 15% to 10%. This acted to reduce the levy rates;
- For the 2007/08 levies

- ✓ The replacement of the prudential margin of 10% for fully funded claims with a risk margin of 11%. This had no significant effect on levy rates
- ✓ The replacement of a 15% prudential margin for pre-1999 claims with a reduced prudential margin of 5% plus a risk margin of 11%. This had no significant effect on levy rates;
- For the 2008/09 levies
 - ✓ The reduction of the funding horizon for new claims from 5 years to zero. This has acted to increase levy rates
 - ✓ The adoption of the risk free rate to discount the liabilities for past claims. This has acted to increase the levy rates; and
 - ✓ The adoption of account specific risk margins. This has acted to increase the levy rate slightly for the Motor account but reduce the rates slightly for other accounts.

We examine the framework and key parameters in more detail below.

7.6 Funding levels and margins

As one can see from Table 7-1, ACC has for the past few years incorporated a margin in their funding target. This has been at a similar level from year to year although it was previously labeled a prudential margin and it is now labeled as a risk margin. We discussed the arguments for and against the adoption of a funding margin in one of our previous reports but did not do so last year. However, it continues to be topic of some interest to the various stakeholders so we readdress it this year.

For the purposes of this report we define a margin as an extra provision above a central estimate of future claims payments on incurred claims, discounted at a risk free rate.

7.6.1 Risk margin for the balance sheet provision

We regard the decision of whether or not to adopt a risk margin in the balance sheet provision as primarily an accounting issue. We understand that the accounting advisers to ACC have recommended that a risk margin be included in the balance sheet provision.

The risk margin that has been adopted is at a level that gives a calculated probability of sufficiency of 75%. Again, we regard the adoption of a 'probability of sufficiency' approach and the selected probability of sufficiency as an accounting issue. Given a selected probability of sufficiency, the calculation of the margin is an actuarial issue. The calculation of the risk margins is carried out by PwC.

The resulting margins are 13% for the Motor account and 11% for the Work and Earners' accounts. We have reviewed this calculation in the TFCA Valuation Review and we are comfortable with results of the calculation.

7.6.2 Current funding targets

It is misleading to discuss margins without consideration of the funding target. The funding target is the combined effect of the funding mechanism,

the ad hoc levy stability adjustments and the margins. We show these in the table below:

Table 7-2 Funding targets

	Percentage of central estimate discounted at risk free rate		
	Work	Earners	Motor
Pre 1999 claims			
Prudential margin	5%	5%	5%
Risk margin	11%	11%	13%
Funding mechanism target ¹	100%	100%	100%
Total funding target	116%	116%	118%
Fully funded claims			
Prudential margin	0%	0%	0%
Risk margin	11%	11%	13%
Funding mechanism target ²	115%	115%	100%
Levy stability adjustments ³	-15%	-15%	0%
Total funding target	111%	111%	113%

Notes:

1. Funding target by 2014.
2. Ongoing equilibrium funding level. See section 8.2.
3. Overall effect of levy stability adjustments over 5 years.

7.6.3 *The relationship of the funding target and the balance sheet provision*

The question of an optimal funding target for levy rates and whether or not this should include a margin (positive or negative) is, in our view, largely independent of the existence of a margin in the balance sheet provision. The main area of overlap is that, other things being equal, the level of assets will tend towards the funding target and if this is less than the balance sheet provision then the account will have fewer assets than reported liabilities. However, it seems to us that this is primarily an issue of communication and education, so long as the funding target can be justified.

7.6.4 *Considerations in the setting of a margin in the funding target*

7.6.4.1 *Minimum funding level*

Standard practice and the legislation governing ACC both suggest that the target funding level should result in the accounts being 'fully funded'. This sets a minimum for the target funding level. In general terms 'fully funded' means that the assets are sufficient to support the claims incurred to date, without the need to draw upon future levies. However, the precise meaning is open to interpretation. We can think of at least three possible interpretations which lead to three different minimum target funding levels:

- 100% of the central estimate of liabilities, discounted at a best estimate of the expected earning rate on the asset portfolio;

- 100% of the central estimate of the liabilities discounted at the risk free rate; and
- 100% of the balance sheet provision, including risk margins.

If we suppose, for the moment, that an account is closed (i.e. there are no future levies or claims) and consider its financial progress then an asset level equal to the first option above, 100% of the central estimate of liabilities, discounted at a best estimate of the expected earning rate on the asset portfolio, is expected to an amount sufficient to provide for all claim payments without leaving any excess.

The higher asset level given by the second option, 100% of the central estimate of the liabilities discounted at the risk free rate, is likely to generate excess investment earnings. Over time this is likely to translate into an excessive level of assets since the investment returns are likely to be higher than the risk free rate.

The still higher level of assets given by the third option will generate a correspondingly higher level of excess assets as the risk margin is released on claim payments which have been made.

This argument seems to lead us to the first option as a correct minimum funding target. However, this has two significant disadvantages in that:

- The minimum funding level is dependent on the asset mix and forecast returns both of which can change markedly over time. In addition, the asset returns vary widely and a wide range of forecasts can be justified as 'reasonable'. This means that the minimum funding level is highly dependent on a subjective forecast and we do not regard this as desirable;
- No account is taken of the risk of the asset strategy or the variability of the asset returns. To take an extreme example, if the assets were all invested in "fine art" with an expected return of 20% per annum, the minimum funding level would be calculated by reference to a discount rate of 20% per annum. The assumed value of the liabilities would be comparatively small and the account would appear to be well funded when, in fact, all that has happened is that a greater investment risk is being borne by the levy payers. In general terms, this relationship between the assets and liabilities can lead the managers of such an account to adopt a more aggressive investment strategy than they otherwise would.

For these reasons we prefer that the concept of 'fully funded' be determined by reference to the second option that we presented above; that is 100% of the central estimate of the liabilities discounted at the risk free rate although we acknowledge that there is room for a different view.

For this reason we are pleased to see the change this year to the use of the risk free discount rate to discount the past claim liabilities in the calculation of the funding target.

7.6.4.2 *Introducing a margin in the funding target*

Having determined a minimum funding target, the next step is to consider whether or not a margin of some sort is required. We do not distinguish between a prudential or risk margin here since, in funding terms there is no significant difference. Building a margin into reserves can be viewed as

nothing more than advanced funding for some potential adverse development.

For instance, if an account that is 110% funded (due to the adoption of a 10% margin) is subject to a shock that reduces the funding position to 90%, there may be less “pressure” to quickly restore funding to 110% than if funding was reduced from 100% to 80%. In this sense, a margin buys time to restore the funding level in the event of a shock.

We note that a margin does not greatly improve the stability of the levy rates if the intention is to always restore the margin after any shock, within the same timeframe. The margin only helps in this way if it gives more time to restore the funding level.

7.6.4.3 Intergenerational inequity

Finally, a major consequence of the adoption of a margin is that building it up takes funds away from one generation of levy payers who pay higher levies and transfers it to the generation of levy payers who benefit from both the investment earnings on the excess funds and the flexibility it gives in the face of adverse shocks.

7.7 Taylor Fry’s opinion on the current mechanism and parameters

7.7.1 Connection to funding principles

It is not immediately apparent that the funding mechanism and parameters are tied to the funding principles presented in section 7.1. Although not directly part of our scope, we offer the suggestion that an alternative mechanism which establishes a quantitative connection between the funding parameters and the funding aims would be easily achievable and enlightening.

For instance, the levy stability aim could be expressed as leaving the rates unchanged from last year’s rate so long as the funding horizon required to reach the funding target was not shorter than two years or longer than eight years. This is one of many options and we use it as an example only, rather than indicating it as a preferred choice.

7.7.2 The correct level of margin

In summary, our view is that the adoption of a margin in the funding target is a separate question to that of a margin in the balance sheet provision. Just because risk margins have been incorporated in the balance sheet provision it does not necessarily follow that the levy calculations should include them.

Given that the adoption of a margin in the funding target inevitably results in a level of intergenerational inequity the case for the adoption of such a margin is not clear cut. The decision to adopt a margin is only of any practical value if it is available to smooth any adverse development or funding ‘shock’. Therefore we suggest that in the case of the ACC scheme, given that there are significant margins in the funding targets, it would be more transparent to all stakeholders if their use in such a situation was built into the funding policy and mechanism in some way. Otherwise someone could validly question the value in adopting them when set against the cost to the current generation of levy payers.

7.7.3 Robustness of the funding mechanism to changing circumstances

In our view, an optimal choice of funding mechanism and parameters should be able to cope with a wide variety of circumstances without requiring change or ad hoc adjustments to the resulting levy rates. There is no evidence presented in the Levy report which supports the ability of the current mechanism and parameters to do this.

For example, we have not had the opportunity to run ACC's projection model on scenarios of our own choosing and it is not practical, within our time and cost constraints, to make our own projections. However, it appears to us that the equilibrium funding levels for the Work and Earners accounts are likely to be around 115%. We see no particular reason why one should choose to fund at this level and it is clear that the levy rates coming directly from the funding mechanism are higher than they need to be for the next few years.

In our opinion, the need for 'levy stability adjustments' (discussed in section 9.1), the varying equilibrium funding levels for the different accounts positions and the history of changes to the funding parameters indicate that the current funding mechanism and parameters could be substantially improved.

7.7.4 Levy rates after and immediately before 2014

Also, we draw attention to several issues resulting from the fixed 2014 funding horizon for the pre-1999 and residual claims.

7.7.4.1 Potential volatility in pre-1999 levies before 2014

As 2014 approaches, the time over which to fund any excess or deficiency in funding of the pre-1999 pools reduces. This means that the volatility in the pre-1999 levies will increase rapidly. This can already be seen in Table 8-1 where a strengthening in the actuarial assumptions has led to a \$28 increase in the pre-1999 Motor levy. If such an assumption change is made again two years' time, the impact on the pre-1999 levy will approximately double since the funding horizon has approximately halved. This could be a major issue in two or three years' time. If there is appreciable volatility in the experience or actuarial assumptions then either the funding targets and horizons for the pre-1999 claims will need to be softened or there will be unacceptable variation in the pre-1999 levies.

7.7.4.2 Excesses and shortfalls in the residual and pre-1999 pools after 2014

Let us assume that the target funding level of 105% of liabilities discounted at the risk free rate and including a risk margin is met as planned in 2014. Further, assume that experience after 2014 matches the assumptions made for the levy calculations at 2014. Then over time the funding levels will rise above 105% as the risk and prudential margins are released and the investment returns exceed the risk free rate. On the other hand, it is almost certain that experience after 2014 will not match the 2014 actuarial assumptions. There will be either an excess or deficiency of funding developing over time. Our understanding is that there are no plans yet in place to deal with this eventuality.

We recommend that the stakeholders should consider developing a mechanism to deal with the excess or deficiency of funding. It will be easier to do this before 2014 than afterwards when the shortfall or excess of

assets has already emerged. We note that this issue has become even more significant since the allocation of gradual process claims to the Residual account since the emergence of a new type of latent claim close to or after 2014 would have a major financial effect on that account without the ability to raise extra funds.

7.7.4.3 Sudden reduction in combined levy rates in 2014

We note that there will be a sudden major reduction in levy rates after 2014 when the pre-1999 claims are fully funded. We do not regard it as our place to make pronouncements on intergenerational equity of levy payers but point out that there are a number of features of the funding policy that lead to pre-2014 levy payers experiencing volatility in the levy rates and potentially increasing levy rates even though the accounts are likely to be well funded. Post 2014 levy payers are likely to be in a much better position.

7.7.5 New claims reserve adjustment

We think that the change to the new claims reserve adjustment, in combination with the other parameters of the funding mechanism, improves the chances of the funding position for the Motor Account tracking the new target of 100% of liabilities, discounted at the risk free rate and including the risk margin. However, as noted in section 7.7.3, we think that it results in higher than planned funding levels for the Work and Earners' accounts. Further, if ACC choose to persist with this change, we think that it would be worth considering phasing it in over a few years rather than implementing it immediately. However, we acknowledge that the effects are partly mitigated in an ad hoc fashion via some levy stability adjustments (see section 9.1).

7.8 Recommendations

We recommend that ACC document the aims of their funding policy in more detail and show how the mechanism and parameters achieve those aims under various conditions. The contribution of the margins built into the funding targets towards levy stability should also be modeled and the decision to adopt these margins should be assessed against this contribution. We anticipate that such an analysis may lead to an amendment to the current funding mechanism.

We recommend that the stakeholders should consider developing a mechanism to deal with over or under-funding emerging in the residual accounts after 2014 and the likely volatility in tail levies leading up to 2014.

If ACC continues with the approach of charging the risk margin in full in new claims then we think that it would be worth considering phasing it in over a few years rather than implementing it immediately.

8 Calculation of reserve adjustments and projected funding levels

8.1 Changes in reserve adjustments

8.1.1 Pre 1999 claims

The 2007/08 levies were set in October 2006, based on projections of the assets and claims liabilities until 2014. In accordance with the funding policy, the levies were set so that a constant rate over the period until 2014 would, on the assumptions adopted, result in the accounts being full funded at that time. Therefore, if conditions and assumptions remained unchanged over the last year, one would expect the levy rates also to remain unchanged. The changes for the Earners Account are minor. However, the 2008/09 consultation levy for the pre-1999 Motor claims has risen to \$145 per vehicle from a 2007/08 rate of \$109. Table 8-1 shows an approximate analysis of the important factors:

Table 8-1 Sources of increase in the Motor tail levy

	\$
Tail levy 2007/08	109
Correction to assets	-1
Difference in projected levies to 30 June 2008	2
Experience and change of actuarial assumptions	28
Change in risk margin	2
Change in discount rate	2
Change in projected returns on assets	-1
Miscellaneous	2
Total	35
Tail levy 2008/09	145

The items related to the change in funding policy have a relatively minor effect. The largest effect is due to the effects of experience and change in actuarial assumptions. This has added \$28 to the tail levy.

The increase of \$28 is due in large part to the increase in the allowance for superimposed inflation for social rehabilitation payments to seriously injured claimants. There is considerable uncertainty as to whether or not the current allowance is sufficient. Interested readers are recommended to consult the TFCA Valuation Review where this issue is discussed in detail. Insofar as the tail levy for the Motor Account is concerned, there is the potential for experience to diverge widely from the adopted assumption – either positively or negatively.

The closer one gets to 2014, the larger effect any changes in assumptions will have on tail levy. If a change to the actuarial assumptions similar to the one made for 30 June 2007 were to be made, for example, just before the calculation of the 2010/11 rates then this could easily add \$60 or more dollars on to the levy rate.

This is an example of the need to consider alternatives to the fixed funding date of 2014 for the pre-1999 claims. We discuss this further in section 7.7.4.

Of lesser (but still significant) importance are:

- There is an error in the calculations for this Levy report in the levy income for the year to 30 June 2008. We anticipate that the correction of this error will lead to a decrease in the tail levy of around \$2;
- The -\$1 adjustment due the correction of an error in the asset value used for the last report.

8.1.2 *Residual claims*

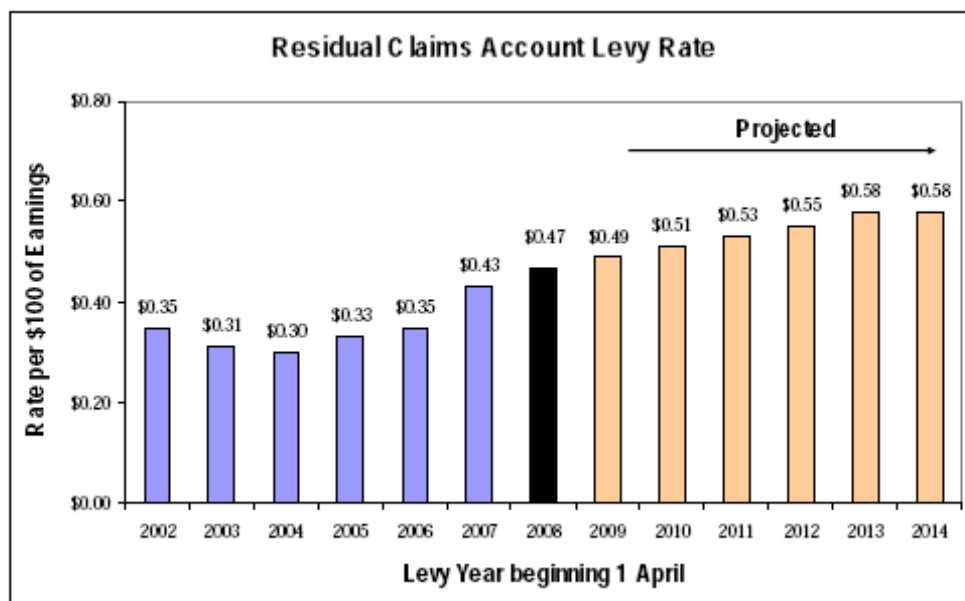
These are the pre-1999 claims arising from employment relationships including those late reported gradual process claims arising from, for example, hearing loss and asbestos exposure. These latter claims are allocated to the Residual Claims account based on their period of exposure although the date of injury is taken to be the earlier of the date of first treatment or incapacity. Therefore, there will be claims with post -1999 (and maybe post-2014) injury dates eventually reported and allocated to the Residual Claims account.

As far as levies are concerned, the Residual Claims account is treated in much the same way as the pre-1999 Motor and Earners' claims. There has been a minor change in the levy rate for residual claims which is likely to be due to the same actuarial assumption changes as we have discussed for the Motor pre-1999 claims. However, given that the change is minor, we have not analysed it further.

However there is one unusual feature of the Residual Claims account which is the funding pattern adopted for the gradual process claims. Rather than a level levy rate, a relatively complex funding pattern is adopted that implies an increasing levy rate until 2014, after which levies are intended to cease.

The Levy report shows the expected levy rates in future years and we reproduce the graph below:

Figure 8-1 Expected tail levies for the Residual Claims account



We question whether it is necessary or desirable to adopt such a funding plan rather than level funding. In equity terms, there is no reason to charge the levy payers of future years any more than currently, when the claims have arisen due to past exposures. One line of reasoning that could support the current funding plan is that it may be preferable to delay funding for the future gradual process claims in case they do not materialise.

8.1.3 Past fully funded claims

In the terminology of ACC's funding mechanism, 'past' fully funded claims are those non-gradual process post-1999 claims which have an accident date before the levy year for which the rates are being calculated.

As discussed in section 7.2.3 above, past reserve adjustments are calculated separately for the Work, Earners' and Motor accounts, based on projecting the assets and liabilities forward for five years. If the accounts are over-funded, as they are currently, then the past claim reserve adjustment is negative i.e. it offsets the remaining components of the levy.

A detailed analysis of changes in the past claims reserve adjustments is difficult due to the overlap of last year's new claims reserve adjustment with this year's past claims adjustment. Nevertheless, we give an approximate analysis below.

8.1.3.1 Work account

The reserve adjustment for the 2007/08 levies is $-\$0.30$ per $\$100$ of wages (i.e. $-\$0.30\%$). The new reserve adjustment is $-\$0.35\%$. We have not analysed this change in any detail, other than to observe that, in contrast to the other accounts, the actuarial assumptions for the Work account have been weakened slightly which has reduced the assessed claims liabilities and strengthened the reported funding position. This, along with a favourable investment return, has resulted in a lesser (i.e. a more negative) funding adjustment.

8.1.3.2 Earners account

The reserve adjustment for the 2007/08 levies is $-\$0.12\%$. The new reserve adjustment is $-\$0.10\%$. This is a small change and we have not analysed it further, other than to note that it is consistent with stronger actuarial assumptions, partially offset by a favourable investment return.

8.1.3.3 Motor account

Although the change in the funding adjustment for the Motor account is small, we analysed it in detail since it is made up of several offsetting factors. During the course of our detailed analysis we uncovered two offsetting errors – one in the 2007/08 calculations and one in the calculations for this Levy report. The latter error will need correction although, depending on the levy stability adjustments eventually adopted, the final Levy rate may not change.

Table 8-2 Change in fully funded past claims reserve adjustment for Motor account

Motor account	
	\$
Past claims reserve adjustment	
2007/08	-30
Excess levy income	-1
Excess investment income	-4
Less claim payment and expenses	-1
Less other expenses	0
Error correction	-5
Miscellaneous	-1
Total change in assets	-13
Change in claims liabilities	18
Risk margin	1
Discount rate	1
Expected return on assets	-2
Correction to levy income to 30/06/08	-3
Miscellaneous	2
Total all changes	6
Past claims reserve adjustment	
2008/09	-25

Important features of Table 8-2 include:

- For the previous Levy report, the assets of this part Motor account were understated which led to a 2007/08 reserve adjustment which was incorrect by approximately \$5 per vehicle;
- Good investment returns over the year which have decreased the adjustment by another \$4 per vehicle;
- An error in this year's Levy report calculations of the levy income for the year to 30 June 2008. The correction of this error will increase the 2008/09 adjustment from $-\$25$ per vehicle to $-\$22$ per vehicle;

- The increase in the adjustment of \$18 per vehicle, due to the change in the claims liability. This is due in large part to the increase in the allowance for superimposed inflation for social rehabilitation payments to seriously injured claimants. As in section 8.1.1, we draw attention to the uncertainty in this assumption and the potential for further increases or decrease from this source.

8.1.4 *New claims*

As described in section 7.4, the reserve adjustment for new claims is now calculated with an immediate funding target i.e. the risk margin is funded immediately and in full. The change adds 5%, 9% and 5% to the final levy rates for the Work, Earners' and Motor accounts respectively. This is a significant and immediate change for current levy payers.

8.2 **Projected funding positions (without levy stability and rounding adjustments)**

Leaving aside the issue of levy stability adjustments for the moment:

- The increase to the New claim reserve adjustments is likely to:
 - ✓ Increase the levies in the short term
 - ✓ Decrease the fully funded past claims reserve adjustments over the medium term as they act to offset the higher levies being paid
 - ✓ Result in a higher equilibrium funding position than the previous set of funding parameters;
- The move to using a risk free discount rate for the liability target in the past claims reserve adjustment will also increase the equilibrium funding position although, given that the risk free rate and the assumed long term rate of return on the assets were almost equal at the time the Levy report was prepared, the effect of this on the figures in the report is not great (but see section 8.3).

ACC have supplied us with spreadsheets that project the levies and funding positions over the next 5 years. These are complex and we have not reviewed them in detail. However they give interesting information on the effects of different levy strategies which is not detailed in full in the Levy report. First we present the results of adopting the levy rates given directly by the funding mechanism with its current parameters.

Table 8-3 Projected levy rates and funding positions given by the current funding mechanism

Year	Work			Earner			Motor		
	Levy rate (\$% of earnings)	Change in levy rate (%)	Funding level (%)	Levy rate (\$% of earnings)	Change in levy rate (%)	Funding level (%)	Levy rate (\$ per vehicle)	Change in levy rate (%)	Funding level (%)
2007/08	1.32		166%	1.16		110%	204.78		115%
2008/09	1.16	-12%	152%	1.40	21%	113%	267.44	31%	109%
2009/10	1.26	9%	141%	1.43	2%	115%	280.60	5%	106%
2010/11	1.34	6%	133%	1.44	1%	115%	290.30	3%	103%
2011/12	1.40	5%	127%	1.45	1%	116%	298.88	3%	102%
2012/13	1.46	4%	123%	1.46	0%	116%	305.40	2%	101%
2013/14	1.51	4%	120%	1.46	0%	116%	311.40	2%	100%

Note: Funding levels in this table are presented as a percentage of the balance sheet provision i.e. future claims payments for claims already incurred, discounted at the risk free rate and including the risk margin.

Important points to note from the table include:

- The levy rate for the Work account for 2008/09 is 12% lower than the current rate, mainly due to a levy stability adjustment which has been applied to the current rate. Subsequent rates then increase as the past claim funding adjustment runs down. The funding level decreases to be 133% by 2014 although it is not clear where the eventual equilibrium funding level will be. There is a case for a continuing levy stability adjustment to smooth out the immediate decrease and subsequent increase in rates and also to target a funding level closer to 100%. ACC have suggested an appropriate set of adjustments which we discuss in section 9.1;
- The levy rate for the Earners account is 21% higher than the current rate. Subsequent rates then remain stable. The funding level increases to be 116% by 2014 and appears to have reached equilibrium. There is a case for a levy stability adjustment to smooth out the immediate increase also to target a funding level closer to 100%. ACC have applied an appropriate adjustment for the 2008/09 rate (although they have not disclosed this in the Levy report) which we discuss in section 9.1;
- The levy rate for the Motor account for 2008/09 is 31% higher than the current rate. Subsequent rates then increase, broadly in line with inflation. The funding level decreases to be 100% by 2014 and appears to be close to equilibrium. There is a case for a levy stability adjustment to smooth out the immediate increase in favour of a set of progressive increases. However, since the funding level ends up at 100%, this smoothing will result in higher medium term rates than otherwise. ACC have suggested an appropriate set of adjustments which we discuss in section 9.1.

8.3 Change in discount rates

Since the release of the Levy report there has been a fall in the risk free discount rate of approximately 0.5% pa. Although we have not quantified

the effect of this change, it seems clear that to simply recalculate the levy rates on the new discount rate will have a significant upward impact on the rates for all the accounts.

We note that, if the levy rates are being re-calculated to incorporate a new discount rate, then recent asset changes should also be taken into account. This would potentially mitigate some of the effects of the decrease in discount rate. We note also that if a portfolio is fully funded and the assets are matched to the liabilities by term then a change to the discount rate will cause equal and opposite movements in the assets and liabilities so that there is no change in the levy rate. For the ACC scheme, any increase in the levy rates due to the discount rate movement is due to:

- The partial funding of the liabilities; and
- The adoption of non-matched investment strategy.

8.4 Recommendations

We recommend that the apparent errors in the tail levy and past claims reserve adjustment for the Motor account be corrected. We anticipate that this will increase the tail levy coming directly from the funding policy by \$2 per vehicle and the fully funded levy coming directly from the funding policy by \$3 per vehicle. There is scope to delay the increase to a future year, See section 9.1.3.

We recommend that ACC consider whether the increasing funding plan for the Residual account is necessary or optimal.

We recommend that any changes to the levy rates as the result of the recent discount rate fall be mitigated by taking into account recent asset changes, if any, and that the implications of the remaining levy increases for the funding policy are considered.

9 Levy stability and other adjustments

9.1 Levy stability adjustments

9.1.1 Disclosure of levy stability adjustments

We define levy stability adjustments as being adjustments to the levies from the rates resulting directly from the application of the funding policy and mechanics of the calculations. By this definition, there were two levy stability adjustments to the 2007/08 levy rates, one for the Work account and another small adjustment for the Earners account. We note that these were not disclosed as ad hoc adjustments either in the last Levy report or in this one. Similarly, there are levy stability adjustments for all three accounts this year although they are not all clearly disclosed.

We note that this year's adjustment for the Earners account which is described as being 'Adjustment to round Earners' to nearest 10 cents' despite the adjustment being far more than is required for such a rounding.

We believe that full transparent disclosure of subjective adjustments is important in a public consultation document.

Also, in addition to the adjustments for this year's Levy report it is likely that, given the current funding policy and its implications, there will need to be continuing adjustments in order to achieve the funding plan. Although the adjustments will, no doubt, be reviewed each year we believe that the consultation document should clearly set out the expected adjustments over the medium term and the implications for future funding levels.

9.1.2 Past and likely future levy stability adjustments

We present below the table that we would like to see contained in future Levy reports:

Table 9-1 Past and likely future levies and stability adjustments

Year	Work (\$% of earnings)				Earner (\$% of earnings)				Motor (\$ per vehicle)			
	Levy rate from funding plan	Levy stability adj	Final levy rate	Change in final levy rate (%)	Levy rate from funding plan	Levy stability adj	Final levy rate	Change in final levy rate (%)	Levy rate from funding plan	Levy stability adj	Final levy rate	Change in final levy rate (%)
2007/08	1.22	0.10	1.32		1.13	0.02	1.16		205	0	205	
2008/09	1.16	0.09	1.25	-5%	1.40	-0.16	1.25	8%	267	-13	255	24%
2009/10	1.26	-0.01	1.25	0%	1.43	-0.10	1.33	7%	281	-6	275	8%
2010/11	1.34	-0.09	1.25	0%	1.44	-0.11	1.33	0%	290	4	295	7%
2011/12	1.40	-0.15	1.25	0%	1.45	-0.12	1.33	0%	299	16	315	7%
2012/13	1.46	-0.21	1.25	0%	1.46	-0.03	1.42	7%	305	9	315	0%
2013/14	1.51	-0.26	1.25	0%	1.46	-0.04	1.42	0%	311	3	315	0%

The table shows the likely future rates against those coming directly from the funding mechanism and the need for ongoing stability adjustments.

9.1.3 Projected funding position with levy stability adjustments

Finally, we show the projected funding levels which result from the adjusted rates and compare them with the funding levels which come directly from the funding mechanism.

Table 9-2 Past and future projected funding levels

Year	Funding level (%)					
	Work		Earner		Motor	
	Unadjusted levies	Adjusted levies	Unadjusted levies	Adjusted levies	Unadjusted levies	Adjusted levies
2007/08	166%	166%	110%	110%	115%	115%
2008/09	152%	155%	113%	108%	109%	108%
2009/10	141%	144%	115%	107%	106%	103%
2010/11	133%	133%	115%	105%	103%	101%
2011/12	127%	122%	116%	102%	102%	101%
2012/13	123%	111%	116%	102%	101%	101%
2013/14	120%	100%	116%	102%	100%	101%

Note: the funding levels shown here are percentages of the balance sheet provision i.e. including the risk margin.

This table makes it clear that the negative levy stability adjustments for the Work and Earner accounts result in funding levels close to 100% by 2013/14 and the negative levy stability adjustment for the 2008/09 Motor levy must be offset by increases in the levy of 7-8% pa for the subsequent three years in order to maintain a funding ratio of 100%.

9.2 Bad debt allowance

The calculations also make an allowance for bad debts i.e. where levies are invoiced by ACC but not received. The allowances are small but are not justified in the report. However, we have received ancillary material from ACC which justifies the assumptions made.

9.3 Under/over collection allowance

From a wider perspective, not only are all levies invoiced by ACC not received but the overall levies collected can be quite different from those which are assumed in the calculations in the Levy report. Some details of this are given in ACC's annual report each year. We note that systemic under-collection could result in under-funding and vice versa. We suggest that the past history of under/over collection is analysed and if there is any consistent bias then an allowance should be made in future levy calculations.

9.4 Recommendations

We recommend that future Levy reports are more transparent in their disclosure of current and likely future levy stability adjustments and the consequences for projected funding levels.

We recommend that all relevant stakeholders note the strong likelihood of further increases in the Motor levy, partly as a result of keeping it artificially low for 2008/09.

We recommend that ACC investigate the past under/over-collection of levies to establish whether or not there is any systematic bias.

10 Partnership Programme and CPX Levies

10.1 Partnership Programme

10.1.1 Description

10.1.1.1 Full Self Cover ("FSC") employers

The majority of the Partnership Plan is comprised of the Full Self Cover ("FSC") employers. FSC employers manage their own claims for a cover period (usually 1 year) and a further claims management period. The claims management period options are 2, 3 and 4 years.

At the end of the claims management period, the FSC employer pays ACC to take back their residual liabilities incurred from the cover period. This liability reversion charge, along with stop loss levies charged earlier, becomes part of the funds in the Employer account and the returning residual liabilities, and any stop loss losses, also become part of the liabilities of the Employer account.

10.1.1.2 Partnership Discount Plans

Partnership Discount Plans ("PDPs") allow eligible employers to obtain a discount on their standard levy if they take responsibility for the management and payment of entitlements to their employees for a specified period. There are two PDPs: PDP1 which involves a management period of the year of accident plus one further year; and PDP2 which involves management for an extra two years after the year of accident.

10.1.2 Changes in PDP discounts

The discounts have been re-evaluated this year. We show below a comparison of the discounts for the last two levy years:

Table 10-1 – Comparison of PDP discounts

PDP Option	2007/08 Levy Report	2008/09 Levy Report
PDP1	54%	51%
PDP2	63%	57%

We have not conducted a detailed review of the calculations but we believe that there is an error in each of the proposed new discounts. It appears that the PDP plan employers are being charged in full for the risk margin, as if they were not members of the plan. This means that they are paying levies which include a charge for the risk margin on payments which are not made from the ACC scheme but by the employers themselves.

To rectify this situation, we suggest that the new claims reserve adjustment be spread in proportion to claims costs as is done for the past reserve adjustment. This change would increase the discount for PDP1 Employers from 51% to 59% and would make a similar change for the PDP2 discount.

10.1.3 Stop-loss and High cost claim cover levy rates for Partnership Plan Employers

Stop-loss cover caps the cost borne by “Full Self Cover” (FSC) employers taking part in the Partnership Plan. The cap can be set at any dollar amount between limits expressed as a percentage of the employer’s. The cap refers to costs associated with claims suffered during the course of a policy period.

For the purpose of assessment against the cap, claims cost in respect of a cover period is defined as the total amount paid by the employer *plus* ACC’s charge to take back the residual liability at the end of the claims management period. These values are not subject to any discounting.

When the cost borne by the employer reaches their elected stop loss limit, the responsibility for any further claims costs and claims related expenses reverts to the ACC. In return for this, ACC charges a (compulsory) stop loss levy.

FSC employers also have an option to cap losses from individual “events” in the cover period at one of 7 levels (\$250,000, \$500,000, \$750,000 and \$1m, \$1.5m, \$2m and \$2.5m). This is the first year that there have been 7 levels, last year only 4 options between \$250,000 and \$1m were available. This option is called High Cost Claim Cover (“HCCC”). An additional levy is applied to FSC employers who elect to take out this cover.

The method used to calculate these levies is the same as that used last year. In our review of last year’s levies we commented that the approach used by the ACC to determine the levies for these covers appeared reasonable. We note that our review was a high level review of the overall methodology. We have not examined any detail relating to how ACC have executed the methodology.

10.2 Cover Plus Extra (CPX)

CPX allows the self-employed and shareholder employees to choose a guaranteed level of weekly compensation they would receive if they have an injury. The CPX levy will depend on:

- The level of agreed cover;
- Whether the option to remove abatement from work and non-work weekly benefits has been chosen; and
- The CU to which the worker belongs.

In our previous Levy Rate review, we reviewed, in general terms, the methodology used to determine the CPX rates and concluded that the methodology seemed reasonable. For the 2008/09 levies there have been two changes to the basis for calculating CPX levies:

- The age related discount has been removed; and
- No distinction is now made between “income” and “non income” related components of the CPX levy.

In the sub-sections below we comment on the appropriateness of these two changes.

10.2.1 Removal of the age related discount

For previous CPX levies discounts were offered based on the age of the levy payer. These discounts increased with age and were based on the belief that older levy payers are expected to receive weekly compensation for a shorter period of time.

However, recent analysis carried out by ACC shows that there are no significant differences in total weekly compensation costs of claims for different age groups of claimants. It seems that the decrease in weekly compensation for older self-employed people is offset by an increase in claim frequency. On this basis the removal of the age-related discount from CPX levies seems reasonable.

10.2.2 No distinction between “income” and “non income” CPX levies

The merger of the Employers and Self-Employed Work Accounts has resulted in no distinction being made between income and non-income components of the Self-Employed Work Account levy. Hence it is appropriate not distinguish between these components for the CPX levies.

10.3 Recommendations

We recommend the calculation for the PDP plan discounts be corrected so that the new claims reserve adjustment is spread in proportion to claims costs as is done for the past reserve adjustment. This change would increase the discount for PDP1 Employers from 51% to 59% and would make a similar change for the PDP2 discount.

11 Risk adjusted levy rates by Levy Risk Group in the work accounts

There have been a number of changes to the method adopted by ACC to calculate the risk adjusted levy rates by Levy Risk Group for the Employer and Self-Employed accounts. The main changes are:

- There has been a change to the industry classification scheme;
- The Employer and Self-Employed Work accounts have been combined; and
- A new method for setting risk relativities has been adopted.

These changes are discussed in the sub-sections below.

11.1 Change to the Industry Classification Code

ACC use an industry based classification system that is based on the Australian and New Zealand Standard Industry Classification (“ANZSIC”) system. The ANZSIC system was updated in 2006 by Statistics New Zealand and the Australian Bureau of Statistics to reflect changes that have occurred in the Economy over the past decade. The new system “ANZSIC 2006” has been adopted by ACC for the 2008/09 levy year.

The ANZSIC 2006 system was developed to categorise industries according to industry type based on the description of the business activities carried out. However, as this does not necessarily lead to the same groupings that would be used as an indicator of insurance risk, ACC has modified the ANZSIC 2006 system to better categorise industries according to risk.

The Industry Classification Scheme for the Work account is a hierarchical one with five different levels:

- At the lowest level, there are 534 classification units (“CUs”);
- These CUs are then aggregated into 117 Levy Risk Groups (“LRGs”). LRGs are composed of CUs that are in the same industry and are engaged in similar business activities;
- In the next level of the hierarchy, LRGs are aggregated into 39 Industry Risk Groups (“IRGs”);
- In the fourth level, IRGs are grouped into 19 industries; and
- The final level is the whole account.

The implementation and modification of the ANZSIC 2006 system is described in Appendix D to the Levy Report. We have reviewed Appendix D and conclude that the new classification scheme is appropriate.

In the past we have noted that changes made to the Industry Classification Scheme from year to year introduced some volatility into levy rates and suggested that the processes used to make changes to the scheme be given a less volatile basis. We note that Appendix D contains objective criteria for including a CU in a particular LRG and we expect that the continued application of these criteria will help stabilise year to year LRG levy rate variability.

11.2 Merging of Employer and Self-Employed Accounts

11.2.1 The legislation

A major change that has occurred since the previous Levy consultation is the merging of the Employers' and Self Employed Work Accounts into a single Work Account from 1 April 2007. The legislation enacting the merger of the accounts is the Injury Prevention, Rehabilitation, and Compensation (IPRC) Amendment Act 2007. According to the Act, employers and self-employed people in the same risk class will pay the same levies in the 2010/11 levy year and later. During the transition, levy rates for self-employed people and employers in each industry or risk class will only be able to increase or decrease by up to 25% in relation to the previous year's levy rates. This is justified in the Explanatory Note to the government Bill proposing the Amendment, "to ensure that the transition to a single Work account is as fair and smooth as possible, the Bill provides for a transition period of 3 years for self-employed and employer levy rates in each industry or risk class to equalise."

We note that the Act, in theory, allows an unlimited rise or fall in rates at the end of the 2010 levy year. However, a significant rise or fall at this time seems to us to be at odds with the intention of the legislation, as expressed in the Bill.

11.2.2 Levy reductions for the 2010/11 year

There appears to us to be a possibly unforeseen issue with the implementation of the Act. On average, the Self-Employed rates are approximately twice those of the Employer rates, even after allowing for the differing industry distribution between the two accounts. Therefore, on average, one can easily equalise the average rates in the three available levy years if the Self-Employed rates are cut by 20% each year. However it is not possible to equalise the rates by three successive cuts to the rates of 25% for premium classification groups where the current ratio of Self-Employed rate to Employer rate is greater than 237%. This is around 5% of the Self-Employed premium classification groups. Our analysis is approximate and therefore not conclusive but, on the face of it, for these premium classification groups the reduction from the 2009/10 to the 2010/11 levy year will need to be more than 25%. We believe that this complies with the strict letter of the legislation but raise the issue to ensure that all stakeholders are aware of it.

11.2.3 What has been done for the Levy report

The approach taken ACC to set the relativities and rates for the Employers and Self-Employed is as follows:

- One set of relativities is set. The relativities are set using combined Employer and Self-Employed experience and do not differentiate between the two groups;
- The relativities are applied to the combined aggregate rates for the Work account;

- A “funding adjustment” loading 68% is added to the Self-Employed rates and -12% to the Employer rates. The funding adjustment is designed to be applied for the next two years so that the Self-Employed have contributed \$100M extra to the Work account;
- The rates are compared to last years’ rates and the floor/cap of +/- 25% is applied;
- After two years the funding adjustment will disappear.

11.2.4 TFCA comments on the adopted approach

There are issues concerning the adopted approach we believe require comment.

11.2.4.1 Not consistent with the legislation

The most obvious is that, except where the floor/cap applies, the Self-Employed rate will be 189% of the Employer rate for the 2008/09 year. It is intended that this relativity remain also for the 2009/10 year and then become 100% for the 2010/11 year. From the 2009/10 year to the 2010/11 year, Self-Employed rates will fall by 40% and Employer rates rise by 14%. This clearly does not comply with the legislation.

11.2.4.2 Philosophy of proposed adjustments

We regard the merger of the accounts to be outside our scope and we do not comment on its merits or otherwise. However we note that it introduces new cross subsidies between Employers and the Self-Employed. One of these is offset by the funding adjustment described above. The introduction of cross-subsidies is not necessarily something to avoid and we do not mention it here for the purpose of criticism – just to put the funding adjustment into context. Of course, there are likely to be other cross-subsidies already present in the Work account, for instance between employers of different sizes. We discuss the new cross subsidies below.

The merging of the two accounts introduces three significant cross-subsidies between the Employers and Self-Employed:

- After the transition period, Employers and the Self Employed will pay the same rates. It is clear that the Self Employed risk cost is around double that of an average Employer in the same classification unit so the merger introduces a significant cross-subsidy from the Employers to the Self Employed in each future year;
- The funding position for the Self-Employed account was less than that for the Employers account (although both were over funded). This means that the past claims reserve adjustment, which offsets the risk cost, for the combined account will be more negative for the combined account than the Self-Employed account. This means that past generations of Employers, who have paid for the over-funding in the Employer account will be subsidising future generations of Self-Employed. The size of this cross-subsidy is approximately two years of the cross-subsidy in the risk costs;

- Before the Work Accounts were merged, Self-Employed Levies had two components
 - ✓ An income component that was calculated to provide funding for income-related benefit costs (e.g. weekly compensation or income replacement).
 - ✓ A non-income benefit portion that was calculated to provide funding for non-income related benefit costs (e.g. lump sums, medical treatment costs).

Because non-income benefits are not related to the level of income earned by the injured person, when this component was calculated self-employed earnings were capped at about \$20,000 per annum. With the merging of the Work Accounts a separate non-income component is no longer calculated. The implication of this is that the high income self-employed will now cross-subsidise the non-income benefits of the lower income self-employed.

The funding adjustment which has been adopted for this Levy report is aimed at compensating the future generations of Employers for the funding level cross-subsidy by charging the Self-Employed for the next two years. Effectively, the Self-Employed over the next two years are paying for a cross-subsidy to be enjoyed by the Self-Employed after two years.

11.2.5 Error in Calculation of Levy Rates

In calculating the 67% loading for self-employed risk rates the ACC have used exposures for the 2006/07 levy year rather than the projected exposures for the 2008/09 levy year. A correction of this error would increase the loading to around 73%.

11.3 New Method for Setting Risk Relativities

In many of our past Levy Report Reviews we have commented on the fact that the changes in levy rates by LRG from year to year have been significantly higher than we would expect. One of the main causes of this was identified as being ACC's method for setting risk relativities. In particular, the subjective elements of the method were seen as introducing considerable variability.

The introduction of ANZSIC 2006 along with the merging of the Work Accounts was seen as an opportunity by ACC to respond to these criticisms and implement a new method for setting risk relativities. The new method was developed by PwC and is documented in a letter titled "ACC Work Account Levy Rate Setting Methodology" by Paul Rhodes, dated 12 July 2007.

The main change in methodology involves the use of a weighted average of the last five years claim/earnings ratios rather than trying to subjectively extrapolate past trends in these ratios.

We have reviewed the methodology as implemented by ACC. Whilst we would almost certainly have adopted an alternative, statistically based, methodology we agree that the new methodology adopted by ACC is preferable to the old method. It offers a significant reduction in the variation

in individual levy rates from year to year. We did however find an error in the implementation of the methods which is discussed in section 11.3.1.

The reduction in variability is illustrated in the following table where we compare the relativity movements for the 2006/07 to 2007/08 year determined using the old method and the relativity movements from 2007/08 to 2008/09 calculated using the new method.

As an example of how to interpret Table 11-1, 50% of the Employer account LRGs experienced at least a 10% increase or decrease in their relativity from 2006/07 to 2007/08 using the old method. Using the new method only 3% of Employer account relativities experienced a change of at least 10%.

Table 11-1 Comparison of old and new methods for setting relativities

Movement in relativity	Percentage of LRGs with a movement at least this size	
	Old Method – Movements 2006/07 to 2007/08	New Method – Movements 2007/08 to 2008/09
5%	70%	30%
10%	50%	3%
15%	31%	0%
20%	20%	0%
25%	16%	0%
30%	7%	0%
40%	5%	0%
50%	3%	0%

11.3.1 Error in implementation of methodology

During our review we uncovered an error in the way that ACC had implemented the method for setting risk relativities. This error caused relativities to be miscalculated by more than 5% for 12 out of 117 LRGs. As it happens, ACC had themselves discovered the error a few hours before we did and we understand that they are correcting it.

11.3.2 Hierarchical Credibility Approach

We finish this section with comments on one area of the risk relativity setting method that has not changed. The ACC continue to use the same hierarchical credibility approach to set relativities. We reviewed this approach in detail in our last Levy Rate review and concluded that the approach was reasonable. However we made the following points about the approach that we still consider are worthy of ACC's consideration:

- The credibility formula uses the figure of \$400M of liable earnings for full credibility. This figure has remained fixed at \$400M for a number of years. This means that earnings inflation is gradually lowering the “real” threshold for full credibility. It would be preferable to inflation link this figure.
- The credibility approach adopted does not explicitly consider the volatility of historical loss rates. It is our view that it would be preferable to adopt a credibility model which does take this into account.

11.4 Recommendations

In our view, implementation of the proposed Self-Employed rates, when considered in the light of the legislative requirement that levy rates for self-employed people and employers in each industry or risk class are only able to increase or decrease by up to 25% in relation to the previous year's levy rates, will lead to an over-collection of levies from the self-employed.

We recommend that DoL do not accept the current levy rates.

We recommend that ACC reconsider how it manages the transition period and calculates a levy transition schedule which shows the expected transitions of levy rates over the 2008/09 to 2010/11 levy years. Without such a schedule we cannot be confident that the transition to a single account is being appropriately managed.

We recommend that the error we observed in the relativity calculation is corrected. This will affect relativities for 12 out of 117 LRGs by more than 5%.

12 Individual claim cost capping

12.1 Our observations on the last Levy report

In our review of the 2007/08 Levy rates we commented that ACC's mechanism for capping increases and decreases in the levy rate for a CU at 25% would lead to some anomalous movements in levy rates. In particular we commented that the approach can increase the volatility of those CUs not subject to the cap.

We noted that because the Employer account saw a 22% decrease in its aggregate risk rate and because Employer risk relativities were volatile, 473 out of a total of 554 classification units were subject to a decrease cap.

The notional gain caused by this capping was then removed from the remaining 77 CUs that were not subject to a cap by decreasing their calculated risk premiums by 22%. All other things being equal, we expected that these 77 CUs would be subject to an average increase of around 20% in the 2008/09 levy rounds simply due to the operation of the capping mechanism.

The change to the industry classification scheme and the new method of calculating relativities means that this effect will be difficult to see in the new rates and we have not looked for it.

12.2 Capping for this Levy report

For the 2008/09 levies only 153 Employer CUs were subject to the decrease cap. This means that those CUs not subject to the cap required their risk premiums to be reduced by about 1%. Accordingly, capping is not a significant issue for this Levy report.