

Why does the Accident Compensation Corporation have a fund?

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This commentary examines the case for pre-funding the ACC. It illustrates the investment risk the government runs and suggests that the ACC's accounting-based 'solvency' is an inappropriate concept.

1. Introduction

The theoretical and practical issues around the funding of the Accident Compensation Corporation (ACC) parallel those concerning the partial pre-funding of New Zealand Superannuation. And, as with the New Zealand Superannuation Fund, these issues appear to have consequences for sustainability.

This *PensionCommentary* describes the issues for the pre-funding of the ACC in the context of the government's overall budget and risk management, and concludes that PAYG funding is more appropriate. However, a meaningful debate about how the ACC should be funded also requires a discussion of the historical context. A forthcoming paper explores these contextual issues (St John, 2009 forthcoming).

Recent commentary on the ACC's financial position reflects a lack of understanding of actuarial principles and financing options that are available to governments. In the absence of a proper, research-based debate, decisions may be made about future benefits or levies that are influenced by unnecessary concerns.

2. The ACC's Fund

The ACC has about \$10 billion invested in capital markets by professional managers and overseen by the investment team at the ACC.

For clarity, this *PensionCommentary*, uses the ACC's "Investments" as representing the Fund, rather than the "Total Assets" amount shown in the ACC's annual report (Accident Compensation Corporation, 2008). As of 30 June 2008, "Investments" totalled \$9.5 billion and probably now exceed \$10 billion. Non-investment assets such as receivables and accruals boost the Total Assets to \$13.1 billion: see paragraph 8 below for more on this measure.

¹ An RPRC *PensionCommentary* is an opinion piece designed to provoke discussion on an issue of public significance. The author thanks RPRC co-director, Susan St John, Michael Chamberlain (MCA NZ Limited, actuaries) and Jeff Todd for their helpful comments and suggestions on earlier drafts. However, the views expressed in this commentary remain the sole responsibility of the author.

Current legislation requires that the ACC's insurance obligations should be fully pre-funded by 2014. Apparent shortfalls in achieving that pre-funding goal have been the basis of claims of 'insolvency', calls for levy increases and possible increases in the target date for full pre-funding to 2019. These issues are especially significant given the present economic outlook and the government's constrained fiscal position over the next ten years.

3. The history of the ACC Fund

Since it started more than 30 years ago, the ACC has never had sufficient funds to meet the full actuarial value of its liabilities and, from the outset, full pre-funding was not part of the original Woodhouse design.

At present, the ACC has enough to meet about 3.5 years of claims which is the highest level it has had historically. Based on current levels, if it were to be fully pre-funded, it would require the equivalent of about 8.3 years' claims.

The question is whether the government (through the ACC) needs to continue to move to full pre-funding.

4. The ACC's actuarial condition

The ACC's most recent actuarial valuation was carried out as of 31 December 2008 (PricewaterhouseCoopers, 2009). The actuaries provided the "...final results of our valuation of outstanding claims liabilities for Accident Compensation ... based on data to 31 December 2008, as well as a summary of key movements since 30 June 2008..."

The report portrayed a significant deterioration of \$2.6 billion in the ACC's actuarial position since the previous review only a year before. However, most of the change (\$2.1 billion or 82%) was the result of changes in the actuarial assumptions and accounting standards. Those changes raise significant policy issues:

- Should changes to the reporting standards affect levy rates charged by the ACC?
- Should the ACC and the government use the actuarial numbers in their respective balance sheets?
- Should a government-owned body mimic a privately owned insurance company in this regard?

5. Accounting for the government's activities

The government decided in 1991 that its financial reporting should comply with what accountants describe as "generally accepted accounting practice" (GAAP)². The ACC's assets and liabilities first appeared on the government's balance sheet in 1993³. Initially, that consolidation for Crown entities and State-Owned Enterprises was on a 'modified equity accounting' basis but they have since been fully consolidated on a 'line by line' basis.

² Different countries can have their own versions of these accounting standards but they now seem to be moving to a common set of rules monitored under what the International Accounting Standards Board calls the "International Financial Reporting Standards" (IFRS).

³ Details of the New Zealand experience with respect to the adoption of full accrual accounting are given in (The Public Sector Committee of the International Federation of Accountants, 1994)

The government's latest Budget Economic and Fiscal Update ('BEFU') (The Treasury, 2009) for the government of 20 May 2009 shows "Total Assets" (including accruals) for the ACC of \$13.2 billion and a "Gross Liability" (including accounting provisions) of \$24 billion. That created a "net liability" of \$10.8 billion and contributed to a growing financial 'hole' in the government's accounts.

The ACC's accounts parallel those of private insurance providers. Private insurers should have assets set aside to pay for the cost of known financial liabilities (and also those that are unknown but can be estimated) that accrue as a result of this and past years' activities. There are two main reasons that private insurers should want (or are required) to have such a pool of assets:

a) Security of contractual entitlements

Those who take out insurance want some protection against the provider's potential disappearance. This applies especially to providers that offer benefits that can be payable for many years, such as income-based disability benefits.

b) Paying for the liabilities that occur today

Providers want to ensure that today's premium payers are likely to meet the full cost of the liabilities, now and into the future, that arise in respect of the activities that are insured this year. To the extent that the liability might crystallise tomorrow, there needs to be money available from today's premiums to pay for that eventuality. The provider therefore collects more money today than it needs to meet today's cost. The excess is invested.

6. Is the government different from private providers?

Neither of the reasons that drive a private provider to build up 'reserves' applies to a government-owned entity, particularly a provider like the ACC.

The ultimate owner of the provider, the government, will never disappear. Also, the government has the power to tax to meet future liabilities, expected or unexpected. The ACC has therefore no apparent need to maintain a pool of invested assets to pre-fund its expected, contingent future obligations.

Neither does the government need to undertake the actuarial calculations to establish whether or not it has a liability now or in the future, nor what the size of that might be. Even if it had that information, does it need to show that position on its balance sheet, as happens at present?

If the answer to that question were 'yes', we might expect the same logic to apply to other activities of the government. For example, we know that the government will have to meet unemployment benefits and domestic purposes benefits in the future but it will do those out of taxation tomorrow, rather than build up a fund to meet those expected, but unquantified payments. The same will apply to expected commitments for policing, defence, education and any of the other services the government is expecting to provide next year, or in 20 years. The ACC's obligations seem no different in principle to those other government activities. The fact that they accrue in a way that mimics a private provider of insurance services is not a compelling reason for the provider's financial architecture to also mimic that required, for different reasons, of private providers.

7. New Zealand Superannuation illustrates the point

The point is perhaps best illustrated by looking at New Zealand Superannuation⁴. The government, under the current legislation⁵, promises to pay all those over age 65 a pension after they satisfied modest residency requirements. On the face, that places the government in a similar position to that of a private annuity provider.

We know who all the current pensioners are and how long, on average, they are expected to live. We know the amount of the promised pension and the basis on which it will increase in the future. It therefore appears that the government has a present financial liability in respect of those commitments.

Using actuarial principles, we can calculate the net present value of the NZS entitlements for those already aged 65 or more. The present NPV of current pensions in payment is about \$80 billion⁶ however there is no fund set aside to meet that (the New Zealand Superannuation Fund is for future pensions).

We could then estimate how many will reach age 65 next year and in years to come. The estimates would have to then establish the starting pension as well the expected mortality of future pensioners.

We could estimate the net present values of all those ‘entitlements’ in much the same way as the ACC’s actuaries do for its expected obligations. After allowing for the amount set aside in the New Zealand Superannuation Fund, the net amount – probably more than \$150 billion – might seem to be a financial “hole” in the balance sheet of ‘New Zealand Limited’. It is in this context that some commentators refer to a country’s ‘unfunded pension obligations’ as “implicit debt”. The argument is that, unless an observer takes account of a country’s pension obligations (its *implicit* debt) as well as its *explicit* debt (government bonds etc), it isn’t possible to understand a country’s true financial position. Promises to pay pensions, so the argument runs, are similar to promises to repay borrowed amounts. (See for example Robalino & Bodor, 1996)

The analogy is misleadingly simplistic. The government does not ‘owe’ a current pensioner the amount that the pensioner expects to receive next year and until death; or that a worker expects to start receiving in, say, ten years time. The most that can be said is that the government has agreed, in the meantime, to divert part of tomorrow’s taxation and other receipts to meet tomorrow’s pension payments.

On the other hand, the government certainly does owe a bond-holder the amount borrowed and pays interest on the amount owed in the meantime.

⁴ New Zealand’s Tier 1 pension is payable to all New Zealand residents aged 65.

⁵ The New Zealand Superannuation and Retirement Income Act 2001.

⁶ Based on estimates in each five year age group of the approximately 580,000 of New Zealanders over 65. The commutation factor (to convert pension into an equivalent value lump sum) for the median age is in each case based on average mortality. The calculations use a gross interest rate of 6% (net 4.2%) and wage increases of 3.5% per annum. The pension was in all cases assumed to be half the married rate of \$12,434 (after tax at 12.5%). This is smaller than the average pension actually payable as the amounts for single pensioners (both living alone and sharing accommodation) are larger. Some New Zealand residents over age 65 do not receive NZS either in full or at all. That could be because they have not completed the residency requirements or because they receive a state pension from another country. On the other hand, about 14,000 residents under the state pension age of 65 receive NZS because they qualify as the spouse/partner under the household income test. The commutation factors to calculate the NPV were supplied by MCA NZ Limited, actuaries based on national statistics (Statistics New Zealand, 2004).

At the time the government introduced GAAP accounts, it was concluded that:

“...on the liabilities side, the value of future social welfare obligations is a very large item in respect of which the event giving rise to the liability was considered not to have occurred, over which the government has significant discretion, and which is very difficult to quantify.” (Public Sector Committee of the International Federation of Accountants, 1994, p. 047)

As an aside, it is interesting to note that, in the case of NZS, the exclusion from liabilities noted by the 1994 report could cover NZS payable to a future pensioner, but the words do not seem to exclude current pensions from inclusion. In other words, the actuarial present value of current pensions would, inexplicably, have to be included in the government's balance sheet.

Even though the government has ‘promised’, through legislation, that New Zealand Superannuation will continue as now, we know that it will use its capacity to tax to draw from tomorrow's economy the amounts it needs to meet tomorrow's pension payments. So, if the future amounts of pensions are to be deemed a contingent liability on the government's balance sheet then the corollary is that the government's future capacity to tax its citizens should be regarded as a contingent asset on that balance sheet. That seems just as difficult a concept to accept but, without that ‘asset’ the liability should not be recorded.

Again, at the time GAAP accounts were introduced, there was some debate about whether the government's power to tax should be shown as an asset. It was concluded that it was “...impossible to value the power to tax "asset" with sufficient reliability and the attempt to do so would overwhelm the other information in the balance sheet.” (Public Sector Committee of the International Federation of Accountants, 1994, p. 047)

Anyway, even if all these calculations were carried out, it's difficult to see how they will have added to an observer's understanding of a country's ‘true’ financial position. That must surely be the point of preparing accounts for ‘New Zealand Limited’ in the first place.

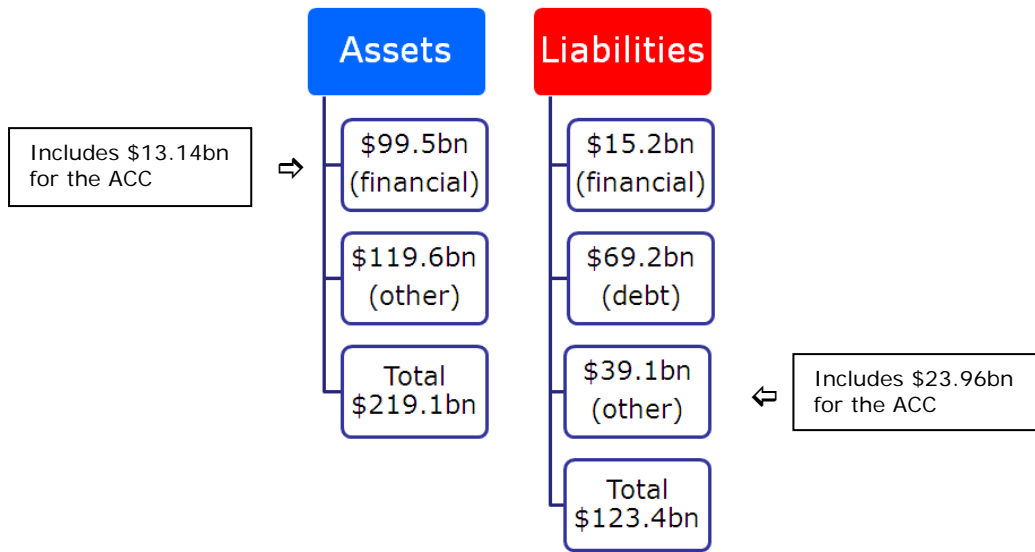
Apart from anything else, a government can always change the rules about pensions. It can also change the ACC's benefits and levies but this *Pension Commentary* suggests that there is no need to do either of those because of the ACC's supposed actuarial position.

8. Having the ACC Fund runs an investment risk

If the ACC/government does not need the ACC Fund for actuarial reasons, but chooses to continue building up that pool of assets, it is effectively making an investment decision that is related to its need to borrow to fund its expected deficits over the coming ten years or so.

Chart 1 on the next page summarises the government's overall financial position in May 2009 (The Treasury, 2009).

Summary from the Budget Economic and Fiscal Update 2009



Source: author’s calculations based on BEFU numbers

When the accounts for ‘New Zealand Limited’ are consolidated for accounting purposes (as in Chart 1), the overall position is that the ACC Fund adds more than \$13 billion to the assets and nearly \$24 billion to the liabilities, a net deficit of \$10.82 billion.

The government has announced its intentions to pay for expected deficits over the next few years by borrowing. If the government lets the ACC Fund grow so that the ACC is fully pre-funded by 2014 (the current objective), the government must assume that the return on the ACC Fund will exceed the cost of the new borrowings it will be making in other parts of its financial activities. The cost of that debt to the government is the ‘hurdle rate’ in this regard.

The cost of long-term debt (with a maturity date in 2017) is currently about 6% per annum. In order for the government to justify the existence of the ACC Fund as part of its overall activities (ignoring the future levies needed to increase the pre-funding level from its current position), the managers of the ACC Fund must achieve at least 6% a year before the government as a whole is better off financially⁷. As the government’s cost of debt changes, so too does the hurdle rate.

The ACC Fund’s investment return in recent years has been:

- 12 months to 30 June 2008: -0.8%
- Three years to 30 June 2008: 7.9% per annum.

Table 1 on the next page shows a year-by-year comparison for the last 11 years.

⁷ There is a case to suggest that the ‘hurdle rate’ should be after-tax; at present 4.2% a year for a 30% taxpayer. That’s because the government pays interest of 6% but collects tax from the lender so the net cost is after tax. However, it is not as simple as first appears. First, if the lender is overseas, the government collects only 15% in Non-resident Withholding Tax. Secondly, if the lender is a charity, the government would have collected no tax. Lastly, for a domestic lender, if the government hadn’t borrowed the money, the lender would have invested it elsewhere and paid tax. So the government would receive the tax regardless. Using gross interest as the hurdle rate seems a better assumption.

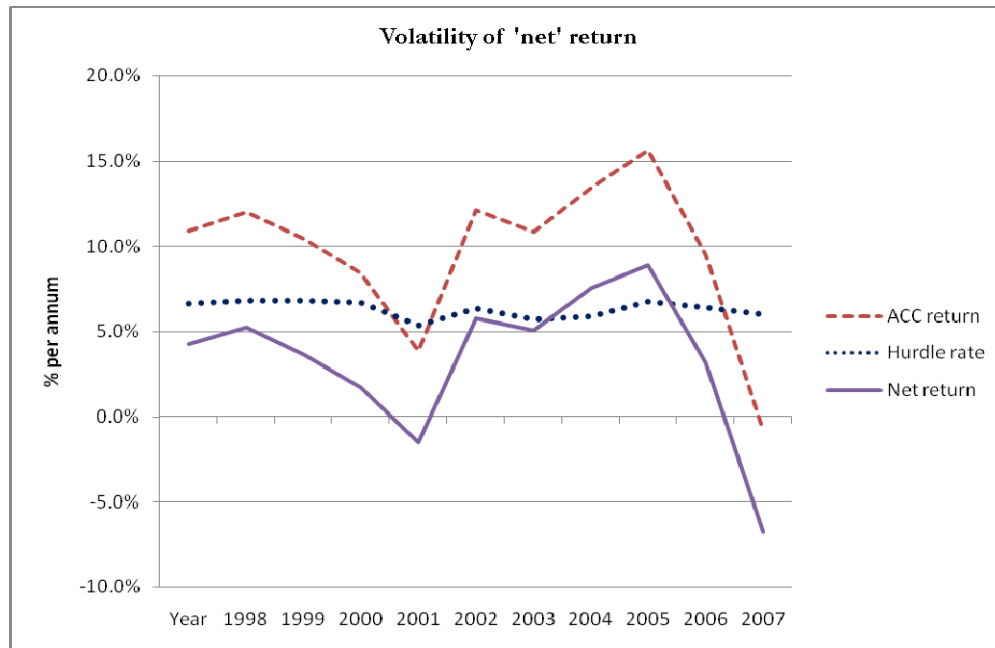
Table 1

ACC Fund's returns vs. hurdle rate 1998-2008		
	ACC Fund's return	Hurdle rate
1998	10.9%	6.62%
1999	12.0%	6.77%
2000	10.4%	6.77%
2001	8.4%	6.66%
2002	3.85%	5.36%
2003	12.1%	6.31%
2004	10.8%	5.72%
2005	13.4%	5.85%
2006	15.6%	6.71%
2007	9.5%	6.35%
2008	-0.8%	5.96%

Note: the hurdle rate is the yield on 10 year government stock at the 30 June in the year. For a proper comparison with the ACC Fund's return, the hurdle rate should be the average for each 12 month period.

Over the *10 years* 1999-2008, the average hurdle rate at 30 June in each year was 6.28%. The average rate of return earned by the ACC Fund was 9.43% p.a. Looking at just the ACC's return is, however, only part of the story. Chart 2 illustrates the impact of the hurdle rate by showing the 'net' return to the government in each year.

Chart 2



By maintaining the ACC Fund the government is effectively in the business of portfolio investing. That is because, when the accounts for the ACC are consolidated as shown in Chart 1, the ACC's investments become the government's. The ACC does not itself need to address the issue (whether or not to be a portfolio investor) but the government should.

We should question whether governments can add value to the portfolio investment business. It seems difficult to argue that the government's role allows it to perform more successfully as a portfolio manager than private investors, even if it sub-contracts that to

private managers. The scale of the government's portfolio investment activities does not add natural value. Although Table 1 shows that the government has been better off over the last 11 years, the question is whether that out-performance over the cost of borrowing (3.15% a year) will continue and whether the risk that it might not is worth running.

It is relatively easy to conclude that, when looking at the government's financial activities as a whole, it should not be borrowing to invest. Leverage magnifies both positive and negative results as Chart 2 illustrates. What, in Table 1, looks like a reasonable set of returns over the eleven years looks rather different when the hurdle rate is deducted as shown in Chart 2.

In this respect, the government is much like households - borrowing to buy shares is inherently risky because the borrowing increases the volatility of the investment's returns. In the government's case, a 'negative' result is a return that is less than the hurdle rate; a 'positive' result is one that exceeds the hurdle rate. The net return over the hurdle rate should be the only one that matters.

Borrowing to buy bonds is probably even riskier because of the small or even non-existent margin between the cost of borrowing (in other parts of the government's balance sheet) and the expected return⁸.

That conclusion on its own undermines the case for maintaining the ACC Fund. It is simply a risk that the government does not need to run⁹.

Borrowing to invest is not necessarily a bad idea. Borrowing is one way that households and businesses pay over time for 'lumpy' investments. A household takes on a mortgage to pay for the home and then repays that over a long period while living in the home. A business might need to take on debt to expand or buy new equipment if it cannot pay for those directly from cash. Even governments might need to do this to pay for expensive motorway networks or other infrastructure. In this case, borrowing to invest has the added advantage of sharing the costs between generations of users of that infrastructure.

Borrowing to buy portfolio investments (shares, bonds etc) is speculation – again, not necessarily a bad thing in itself. The borrower takes on the risk that the returns from those investments will be at least as great as the cost of the debt used to acquire them. Borrowing to invest magnifies the yields and the losses. It turns a good return into an excellent return; and a bad return into a potential disaster.

Chart 1 (the BEFU summary) makes it clear what is really happening. For the next few years at least, every dollar that is added by way of additions to the ACC Fund is, because of the accounting consolidation illustrated in Chart 1, effectively (not actually) a dollar borrowed.

⁸ Over the 10 years 1999-2008, the average yield on all New Zealand government stock (including interest rate driven gains and losses) was 6.64% p.a. (0.36% p.a. above the average hurdle rate). That difference reflects the different durations of the government bonds on issue relative to a hurdle rate based solely on 10 year bonds at a fixed date and also the impact of the capital gain following the fall in yields from 6.62% at the start of the period to 5.96% at the end (Source: MCA NZ Limited, actuaries).

⁹ Much the same arguments apply to the New Zealand Superannuation Fund.

The same also applies to assets already held in the ACC Fund – new borrowing by the government in the presence of the assets held by the ACC Fund is the same as borrowing to invest. That’s because the government has a choice – it can borrow, say, \$1 million and maintain that amount of invested assets in the ACC Fund or it can sell \$1 million of those investments and not borrow.

9. A circular investment trail

There is another aspect of the current arrangements that illustrates a conceptual flaw in the way the ACC Fund relates to the accounts of its ‘parent’ – the New Zealand government.

Part of the ACC Fund (9% at 30 June 2008) is lent to the New Zealand government or, more accurately, constitutes ownership of New Zealand government bonds. The logic of the government’s effectively borrowing to invest in the ACC Fund that then lends the money to the government seems, at best, circular. When looking at the BEFU numbers in Chart 1, approximately \$825 million should be deducted from both the “financial assets” (because the government doesn’t ‘own’ an asset comprising debt that it issues itself) and from the \$69.2 billion shown as “debt” (because the government ‘owes’ that \$825 million to itself).

So, the ACC is collecting more than it needs to meet today’s outgoings and is lending some of that to the government. That is not a necessary criticism of the ACC Fund’s investment strategy. For example, a key actuarial estimate in the calculation of the ACC’s liabilities is the discount rate used to bring tomorrow’s expected payments back to a present value. Given the importance of the discount rate in the ‘solvency’ of the ACC as a stand-alone accounting entity, it makes some investment sense for the ACC to insulate itself against changes in the discount rate by investing in the securities that drive that number. In that way, negative impacts on solvency are partly compensated by positive revaluations in the bond assets held by the ACC. While that driver may be important to the ACC in managing its own independent accounts, the logic disappears following consolidation of the ACC’s accounts with the government’s.

In fact, the ACC could be fully pre-funded at the stroke of a pen. The government could issue the ACC additional government bonds worth \$10.82 billion. If the government did not want to add the implied interest bill of \$650 million a year on those new bonds to its deficit, it could issue 10 year bonds at zero interest¹⁰. The ACC would need to value those at less than their face value to comply with GAAP (at today’s interest rate they would need to be discounted to 56%) so, in fact, the government’s special issue would need a face value of \$19.3 billion.

That may ‘fix’ the ACC’s funding position but would do nothing for the government’s balance sheet, the ultimate ‘owner’ of the ACC. This circularity illustrates what happens when the ACC is treated independently for accounting purposes and why the GAAP accounts do not really help to explain the government’s true overall position.

An alternative approach could see the government issuing the ACC a promissory note that gave a formal commitment to meet all the ACC’s liabilities as they arose. That

¹⁰ There are international precedents for this kind of special government bond issue. All of the assets of the US Social Security Trust Fund are lent to the government at less than market rates of interest. The same applies to most of the retirement saving assets of the compulsory Singapore Central Provident Fund.

document has the same economic effect as government bonds after they are removed from both the government's assets and liabilities post-consolidation. A promissory note would remove the accounting liabilities from the ACC's accounts and obviate the need for a fund of any kind. It would, however, leave the issue of how the government might value the liability expressed through the promissory note. That would underline a point made in paragraph 6 – the ultimate financial strength underpinning the ACC is the government's future capacity to tax and set levies; also the fact that the ACC's 'owner' (the government) will never disappear. The suggested promissory note would emphasise that connection.

10. Does the ACC need actuaries to calculate the levies?

An actuary's calculations are central to the proper administration of a private insurance company. The actuary's basic function is to calculate next year's premiums. This can be a complex process and is usually based on a mixture of:

- **Experience:** actual past and current claims, assets, investment returns, people data, employer data, accident rates etc. and
- **Assumptions** ('guesses'): likely future experience of existing claims, incidence and severity of expected new claims, expected investment returns, and interest rates that are used to calculate the net present values of all these numbers.

The actuary brings all these numbers on to a common, comparable footing through calculating their net present values (NPVs) and compares that total number with the assets held. Any difference between those (a 'surplus' or a 'deficit') can be distributed/recovered over time through the future premiums' being lower/higher than the 'normal' calculation.

The actuary also analyses the insurer's experience – to see where the insurer's risks are and how they might be changing; also whether claims fall within acceptable margins.

The actuarial calculations for a *private* insurer have a number of roles:

- (a) They monitor the provider's **solvency** now and/or over a period. That usually means the actuary also has a regulatory/reporting role to the supervisory authority.
- (b) They monitor **equity** between different groups – for example, between different employers/industries; between different groups of individual policy-holders – to ensure that the premiums received in respect of each group fairly reflect the liabilities assumed by the insurer for that group.
- (c) They give the provider (and its shareholders and regulators) a basis to assess the insurer's **profitability**. The actuary's role is just as important as the accountant's in this regard. The tax authorities also have an interest in this.

This *PensionCommentary* has suggested that the ACC's **solvency** is not relevant to a government-owned provider.

The issue of **equity** between the different groups that use the ACC's services seems less significant than the concept of 'user pays'. The ACC already divides its activities into six

separate “Accounts” that look after different groups¹¹. Given the compulsory nature of the ACC’s coverage and the ACC’s monopoly position, equity across all of the individuals/employers that are covered by the ACC seems scarcely relevant. Ensuring that the ACC’s users meet their costs rather than depend on other taxpayers is probably more significant.

Finally, **profitability** is not an issue for the ACC.

11. Setting levies according to PAYG principles

This *Pension Commentary* suggests that the ACC does not need to use traditional actuarial techniques to set the levies payable by the ACC’s users. There is a better, more understandable, more transparent, simpler way to calculate them – ‘pay as you go’ (PAYG).

The expected cost of the ACC over, say, the next five years is the expected benefits that will be paid in those years (plus administration costs). That is true regardless of the levies collected during the period or the amount of assets held in the ACC Fund or the investment income earned on those. The investment income will help pay for the cost but won’t (and can’t) change the total cost itself.

Next year’s cost will be the benefits and other claims paid next year (plus administration). Part of that cost will be for benefits that relate to claims first made next year; the rest will be for claims made in previous years but where the liability (mostly for pay-related pensions) arose in an earlier year and continues to be paid this year.

In a pure PAYG system, an actuary is not needed to work out the levies – they would be next year’s expected claims divided by the pay/employees/car owners and whatever else is used to drive the basis on which next year’s levies are collected for each of the Accounts that the ACC maintains.

In setting the levies for 2010, some relatively insignificant guesses will be needed as to what might happen next year. Also, in practice, large fluctuations from year to year need to be smoothed so there should probably be some sort of averaging process over the last few years; also an allowance for inflation and likely changes in claiming rates over the next 3-5 years. That process should then be repeated every 3-5 years.

The purpose of the smoothing process would be to make the levy calculation and payment processes easier to administer and also to allow employers and others to budget their likely future expenses. For example, the ACC would not need to re-print the levy tables every year.

The levies calculated in this way would be lower than now overall because:

- (a) The objective of achieving “full funding” by 2014 is no longer relevant;
- (b) The ACC would not be collecting this year the likely *future* costs associated with claims made in this year.

There will also be no need for the \$10 billion in assets currently held in the ACC Fund. The ACC can simply assign those directly to its ‘parent’ – the government.

¹¹The Non-earners’, Motor Vehicle, Medical Misadventure, Self-Employed Work and the Residual Claims Accounts.

12. The advantages of PAYG levies

Moving the calculation of the ACC's annual levies from a 'more than fully funded' basis¹² to PAYG has a number of advantages:

- (a) **Investment returns:** A major uncertainty in the current actuarial calculations is the future returns on invested assets. As had been demonstrated recently, returns can be volatile in the short term. In the absence of the ACC Fund, that uncertainty disappears.
- (b) **Actuarial assumptions:** Another major current uncertainty in the present levy calculation process is the choice of the actuarial assumptions and the degree to which those will be wrong. We must expect them to be wrong, especially over the long periods they are expected to apply but they will probably not all be wrong in the same direction. Some mistakes will be offset by others so the hope is that the package of guesses will be about right overall.

However, the assessed financial position of the ACC at any point is currently a hostage to the actuarial assumptions and the rules with which actuaries are obliged to comply.

For example, the actuaries are obliged to pick a discount rate to NPV future financial obligations. The rules state that the discount rate must be calculated in relation to a "risk free" return – this means using the New Zealand government bond returns.

"Discount rates were set based on examination of yields on NZ government bonds as at the valuation date... A constant gap was applied between discount and interest rate assumptions beyond 10 years duration."
(PricewaterhouseCoopers, 2009)

If the ACC were a private insurance company, that would make some sense because such a rate is independent, risk-free and less capable of manipulation for accounting and reporting purposes. Those concepts matter when regulators, tax collectors, policy holders and financial markets need to be confident of an insurance company's true financial position. However, in the ACC's case, there is no requirement for market-related data on its accounts; tax is not an issue and anyway, it does seem odd that the discount rate used is derived from the bond rates of the ACC's 'owner' itself. That circularity highlights again the conceptual limitations of the current process.

The actuarial assumptions are also inextricably linked to the accounting standards – see next.

Because the proposed PAYG calculations will apply over much shorter periods, any mistakes in the assumptions can be rectified painlessly.

- (c) **Accounting standards:** The current pre-funded status (and the 2014 objective of full pre-funding) are also presently hostages to the accounting standards that fix the way in which the ACC's/government's accounts are presented. As has already been noted (see paragraph 4 above) the ACC has just experienced a \$2.1

¹² "More than fully funded" in respect of next year's accrual of liabilities because the levies will be higher by the amounts needed to cover the actuarial 'losses' incurred in recent years.

billion ‘deterioration’ in its financial position because of changes to the accounting treatment of its liabilities, in large part driven by changes in the actuarial assumptions (that are themselves in part regulated by the accounting standards).

In reality, nothing of such significance happened to the ACC in 2008 to worsen its true financial position. Although the ACC’s outgo is rising, actual claims paid in the nine months to 31 December 2008 were very close to claims the ACC expected that it would have to pay. The expected claims were \$1.951 billion; the actual claims paid were \$1.967 billion. That’s a difference of only \$16 million or 0.82% (PricewaterhouseCoopers, 2009, p. 3.1).

The central issue seems in fact to be the need for the government (and therefore the ACC) to present GAAP accounts in accordance with New Zealand’s local standards (see below in this regard).

- (d) **Administration:** The proposed PAYG system of calculating levies will be much simpler to administer. There would be no need for expensive, complex actuarial calculations and no need for retrospective reviews of those. The ACC would be able to do the calculations itself.
- (e) **Transparent:** Actuarial calculations are difficult to understand as the political debate that followed their release earlier this year illustrated. PAYG calculations are, by comparison, much simpler and their application would be more transparent.
- (f) **Political risk:** The history of the ACC’s financial arrangements, as described in St John (2009 forthcoming), suggests that it would be critical to the success of moving to PAYG (or any other basis) to have agreement from all parties as to the way to manage the ACC. With those conditions in place, financial “blow outs” will be most likely the result of benefit “blow outs” (increases in the benefits promised/paid) or a natural consequence of an ageing population. The direct connection between benefits and levies will make that more apparent.

13. The ‘long tail’ of claims

Under a PAYG system, the amounts paid each year to a long-term ACC claimant will form part of the levy-setting as a whole and that, in the short-run is all we will need to know about the cost of those claims.

If New Zealand needed to know the scale of this liability, it would be a balance sheet issue – not for the ACC but for the government that currently holds the ultimate financial responsibility for the risks carried initially by the ACC. The ACC may do the calculations and show those in its own accounts but, as with any wholly owned ‘business’ of the government, the liability, if we needed to know it, will finally show on the government’s balance sheet as Chart 1 has illustrated.

This is where the actuaries can come in. Someone with the mathematical skills to allow for claims that have arisen in the past, are current and are likely to continue into future years, might then need to make guesses about how long the claims might continue after this year and apply an appropriate discount rate to bring that back to a ‘today’ number.

The number finally calculated will not be an *actual* liability but a *contingent* one because payment of the full amount will not happen immediately and may never happen. Also,

the guesses on which it is based will probably turn out to be wrong. A contingent liability of that kind does not need a specific pool of assets to support the amount calculated. There is a case to suggest that the government needs that kind of information but it would not be needed to set the ACC's levies on the recommended modified PAYG basis. It would also not address the seemingly inconsistent treatment of the ACC's liabilities and other similar 'liabilities' of the government noted in paragraphs 6 and 7 above, like New Zealand Superannuation.

14. Experience-rating

Currently, there is no experience-rating of the ACC's levies whereby the amounts charged in a second or later year would be, in part, a reflection of claims made by the employer or individual.

As already explained, the ACC has a number of "Accounts" where the levies charged relate to the actuarial estimates of the costs of each of the groups involved. Also, different occupations of employees bear different levy rates based on the ACC's view of the risks involved in those occupations.

If the government wished to maintain these differentiations, moving to a PAYG environment would not be an impediment. Changing the incidence of levies need have no bearing on the basis used by the ACC to separate different occupations, activities or even employers or industries for the purposes of setting levies. Arguably, the greater transparency and simplicity that have already been suggested in support of PAYG levy setting will have more immediate impact with the smaller groups associated with differential levies.

15. "Accredited Employers"

At present, larger employers can effectively assume and manage the benefits normally provided by the ACC under its "Partnership Programme". There are complex rules associated with this, given the need to ensure similar coverage and benefits and also to cope with the potential withdrawal by employers from the Programme.

There are two cover options to choose from - the "Partnership Discount Plan", and the "Full Self Cover Plan" that offer different discounts to the standard ACC levies in exchange for the employer's assuming different levels of risk. The employer then manages the benefit claims but can ask the ACC to help. The ACC can also provide stop loss cover. The Accredited Employer can leave the Programme before the end of the selected "claims management period". There can be a price paid on exit in relation to claims made but not paid at that date. That price is based on the then NPV of the expected qualifying claims and will be subject to the same uncertainties that face the ACC as a whole. However, the ACC would, following the assumption of those liabilities from the employer that withdraws, be in an actuarially neutral position after the change.

Moving to a modified PAYG approach for the calculation of levies need not change the Partnership Programme in any material respect. Instead of the present actuarially calculated levies being used as the starting point for the discounts, the PAYG basis would be used instead. However, given the greater variability that would be associated with PAYG levies, even if smoothed over 3-5 year rolling periods, that variability would also be a feature of the levies payable by Accredited Employers for any residual coverage held by the ACC.

On exit from the Accredited Employer programme, the employer's ongoing involvement with respect to qualifying claims that have arisen at the exit date but have not yet been paid might have to change. The current regime is premised on an actuarial basis – the replacement would reflect the new PAYG basis. The employer would retain at least some liability to maintain benefits in payment after the exit date but the payments would now be administered by the ACC. The liability could be reduced on a staged basis for ease of administration over a period but long-term pensions could continue. Having the continued financial commitment of the employer would keep the employer involved, potentially, in the rehabilitation process.

16. A modest 'reserve fund'?

In the past, the ACC's financial reserves have ranged from very small to modest. In real terms the reserve is larger now than it has ever been.

If the proposed PAYG levy-setting regime were adopted, there would inevitably be some surplus at the beginning of each period that would be run down over the period. Having a rolling five year calculation would smooth that effect. Should there be more than that?

There is perhaps a case to suggest that the Fund should be consciously held at a higher level. The arguments in favour would centre around lower volatility in levy rates, greater certainty and, perhaps, potentially less day to day political involvement in levy setting.

The argument against is the one made in paragraph 8 – the investment risk. Every dollar in the ACC Fund is, for investment purposes, effectively a dollar borrowed. The existence in the government's accounts of both debt and the ACC Fund, as shown in Chart 1, means that the government runs the risk of paying more for ACC than in the absence of the Fund.

The financially optimal solution therefore is to keep the ACC Fund as low as is practicable. For other considerations in this connection, see St John (2009 forthcoming).

17. Private competition

In 1999, employers were obliged to choose an insurer to cover the ACC-based benefits for their employees. The ACC could also compete with private providers to offer the cover.

If that happened again, the parts of the business that the ACC competes on will have to be calculated, as now, on normal actuarial principles¹³. To do otherwise would slant the market in favour of the ACC and against private providers (that must calculate premiums on normal actuarial principles). That will see the ACC, as now, collecting more in levies than it needs to pay for current benefits.

The ACC would still not need an actual pool of assets, for the reasons already described. A notional fund can take its place for the purposes of the actuarial calculations and any excess can be passed over to the government. That notional fund can be run on a basis that mimics a private portfolio, in order to maintain "competitive neutrality" with private

¹³ What the Accident Insurance Act 1998 described as "achieving ... competitive neutrality with other insurers in relation to accident insurance contracts" issued by private providers – see section 301(2)(b) for example.

providers, but there would be no need to have actual assets held by the ACC for that purpose.

18. GAAP inappropriate for the government

Although the government's intentions to comply with GAAP in the preparation of its accounts might be seen by many as a worthy objective, complete acceptance of the principles that govern private institutions seems out of place and ultimately unhelpful. The GAAP principles are justified as follows:

“Notwithstanding the special characteristics of Government, the Government applies the same financial reporting standards as applied by other reporting entities in New Zealand. This means that public sector financial statements can be more readily understood by a wide range of people.”

(The Treasury, 2005, p. 8)

The most obvious objection to this justification is that, with regard to the ACC at least, there are no equivalent “reporting entities” in New Zealand or elsewhere that need comparing. The Treasury itself acknowledges the special nature of the ACC by including it in a group of entities with “...rights and obligations and transactions that are unique to governments.”(The Treasury, 2005, p. 50)

In addition, this *PensionCommentary* suggests that, not only are the private sector concepts of pre-funding the ACC's expected obligations inappropriate in the case of a government-run, provider, but also the government is actually increasing its operating risks by having the ACC Fund (and adding to it) while at the same time it is raising debt to finance its other activities. This *PensionCommentary* has also demonstrated that there is much less substance to the Fund than first appears. More than half of the Fund's assets are loans to the government.

The general principles underpinning accounting standards are, in the present case, to give the users of the accounts information about both the financial position and the financial performance of, first the ACC and secondly, the government itself. The point of having standards is that they limit the possibility of manipulating accounting information and they also allow comparability with other equivalent institutions. This is intended to give confidence to the users of those accounts, particularly when comparisons must be made (by, for example, investors).

In New Zealand, insurers must comply with NZ IFRS 4 (Institute of Chartered Accountants of New Zealand, 2004b)¹⁴ This states:

“NZ IFRS 4 specifies the financial reporting for insurance contracts by any entity that issues such contracts. NZ IFRS 4:

(a) applies to all insurance contracts, including reinsurance contracts, that an entity issues and to reinsurance contracts that it holds, except for specified contracts covered by other New Zealand equivalents to IFRS;...” (page 16)

Nowhere in NZ IFRS 4 is there any reference to the special position we have described for an organisation like the ACC. The only references to the ACC relate to two ‘mechanical’ provisions (clauses 4.2.2 and 17.5(a)).

¹⁴ The New Zealand government's accounts adopted NZ IFRS for the first time for the year ended 30 June 2008.

We suggest that NZ IFRS 4 needs re-consideration with respect to the ACC in a similar way that GAAP was modified when first introduced for the government's accounts. For example, because of an absence of historical cost data for many assets, a "...net current value approach to the valuation of assets" was adopted in 1990 (Public Sector Committee of the International Federation of Accountants, 1994, p. 044). Similarly, "public benefit entities" like the ACC are exempt from compliance with the standard NZIAS 14 (Institute of Chartered Accountants of New Zealand, 2004a, p. 4.1) that relates to "segment reporting".

If changing NZ IFRS 4 is not possible then the adoption of PAYG for the purposes of levy-setting by the ACC may mean that neither the ACC nor its 'owner' the government can produce accounts that comply with GAAP. That would not be the best outcome but should not be a fatal objection to the adoption of PAYG principles. The economic substance of the case against pre-funding seems more significant than compliance with standards that are more appropriate for the private sector.

The following further arguments in favour of GAAP accounts for the ACC (and impliedly for the government) do not present insuperable barriers to the adoption of a modified PAYG basis for the ACC's premiums and levies:

- (a) The ACC, or parts of it, may be privatised:** If the government decided to privatise part or all of the ACC (as opposed to opening up the ACC to private competition discussed in paragraph 17 above), no private institution would buy the ACC as it is now because of the \$13.2 billion IFRS-based 'hole' in its balance sheet.

That 'impediment' does not seem to be a convincing argument in favour of pre-funding the ACC's liabilities now but rather making that decision when we know which parts will be privatised and which not. In other words, that seems to be a timing issue rather than an argument in favour of pre-funding. As already suggested in paragraph 9 above, that possibility can be dealt with at the time by the issue of government bonds. If, on the other hand, the government decided that only *future* obligations would be privatised, it would only need to pass over the right to calculate and collect future premiums. Past obligations would remain with the ACC.

- (b) Governments do not always stand behind their 'subsidiaries':** There has been at least one example of the New Zealand government's not standing behind its wholly-owned 'subsidiaries'¹⁵. The argument is that, if the ACC were not pre-funded, its benefits might be at a similar future risk.

Whether or not the accrued ACC liabilities were fully pre-funded would not prevent a government from changing things retrospectively or prospectively. However, aspects of the ACC's activities (such as the Non-earners' Account) seem too intertwined with welfare considerations for the government to abandon the ACC's obligations. In fact, using the modified PAYG basis may actually

¹⁵ An example is Terralink that was allowed by the government to go into receivership in 2001. Another case, the Development Finance Corporation (DFC) had been a government-owned entity but was privatised in 1988. At the time of its receivership in 1989, it was not owned by the government (the shareholders were the National Provident Fund and Salomon Brothers, a US investment bank). However, the government played a significant role in resolving the receivership because of perceived potential damage to both the government's and New Zealand's financial reputation. (Wheeler, 2009)

strengthen the position of current and future ACC beneficiaries. The ACC would then be closer to political realities and politicians might possibly be more reluctant to change things because of their immediate, visible and probably negative impact.

- (c) IFRS may have its difficulties but they apply equally to all:** As has already been observed, NZ IFRS 4 makes no particular recognition of the special position the government holds. The standard therefore applies to what the accountants deem to be similar types of organisation. That's not an argument against GAAP but more a question about the need for special rules that apply to the government's own accounts. However, the case in favour of a 'defective' NZ IFRS is that all similar organisations are treated similarly.

There may be fewer difficulties if the deficiencies in IFRS applied to all *private* sector institutions because they are all 'temporary' entities, can disappear and, in the meantime, need to be supervised and analysed on a common footing. That does not apply to the government. Its activities seem to be fundamentally different types of 'business' that need particular consideration. That is not a case for weakening the accounting standard but rather one that suggests there is a need for a modified, more appropriate standard that applies to governments.

- (d) International credit agencies might penalise New Zealand:** The risk here is that credit agencies and lenders will treat New Zealand differently if the accounting standards were not complied with. The fact that very few countries comply with GAAP¹⁶ suggests that this is not a significant issue. If that did become important, the actuarial calculations could still be carried out and shown in a note to the government's accounts so that everyone could see the results. That need not, however, affect the regular calculation of the ACC's levies which could still be on the modified PAYG basis.

19. Benefits unaffected by funding discussion

This *PensionCommentary* has only discussed how to pay for the ACC's obligations to New Zealanders. It has not discussed what the ACC should pay for – that should be done anyway but it has no connection with the recommended move to PAYG levy setting.

20. In conclusion

This *PensionCommentary* suggests that there are no compelling governance, financial or administrative reasons in a PAYG environment to estimate what the net present value of the ACC's future obligations in respect of current claims might be. This means that the actuarial calculations that are now done, that look decades hence and use estimates about outcomes would not be needed for setting future levies.

A PAYG approach to levy-setting should be simpler, more transparent and less risky financially. It would also lower the investment risk for New Zealand.

The only major technical difficulty with adopting PAYG is the need to change the accounting standards to ones that are more appropriate for an organisation like the ACC. Even if the government were unable to change the standards so that the ACC needed to comply with them, despite its state ownership, there would seem to be no compelling reason for the government, as owner, to raise its financial risk by borrowing to invest.

¹⁶ Australia is the only other country that issues accounts that comply with GAAP.

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