pensioncommentary

THE UNIVERSITY OF AUCKLAND BUSINESS SCHOOL

An article from the Retirement Policy and Research Centre

Why does the Earthquake Commission have a fund?

Michael Littlewood

PensionCommentary 2011-1[1]

21 September 2011

This commentary examines the case for the existence of the EQC's 'Natural Disaster Fund'. It is the third in a series that looked first at the ACC and then at the New Zealand Superannuation Fund. In all three cases, there seems no compelling economic or financial case for any element of pre-funding the government's future fiscal obligations. The argument seems strongest for the EQC. That was the case both before and after the Canterbury earthquakes, as experience has now shown.

1. Introduction

The government has three large pools of capital that are invested mainly in private markets and administered either directly or by private fund managers. They are:

- the **New Zealand Superannuation Fund (NZSF)** that was set up to partially pre-fund future payments of the universal pension (New Zealand Superannuation). Given the current economic difficulties, the government has suspended contributions to the NZSF but has said it intends to resume them when the government's accounts return to 'surplus'. The NZSF held about $19 billion at 30 April 2011.[2]
- the **Accident Compensation Corporation (ACC)** that is building up assets to meet the expected future obligations in respect of claims incurred to date. On an actuarial basis, it expects to be fully pre-funded by 2019. At 30 June 2010 (the last date for which accounts are available), the ACC's investment fund stood at $12.8 billion.
- the **Earthquake Commission (EQC)** that is currently in the news in the aftermath of the Canterbury earthquakes. At the last balance date (30 June 2010) and before the first of the earthquakes in September 2010, the EQC's investment fund stood at about $6 billion.

Based on the latest numbers available, there was a total of about $38 billion of investment assets held in the three state-run institutions. This is the third in a series of commentaries from the Retirement Policy and Research Centre that questions whether any of that money should be there. The answer is, broadly, 'no' as explained next.

---

[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 and Michael Chamberlain (MCA NZ Limited, actuaries) for their helpful comments and suggestions on earlier drafts. However, the views expressed in this commentary remain the sole responsibility of the author.

[2] A press release here summarised the investments held at 30 April 2011.

PensionCommentary 2009-1 (Littlewood 2009) suggested that the ACC should be run on a pay-as-you-go (PAYG) basis and so did not need a fund, other than to cover its short-term needs. In summary, accounting standards that require pre-funding for privately owned insurers have no relevance to a 'government-owned' obligation. Running the ACC on a rolling five year funding basis as suggested in *PensionCommentary 2009-1* would see some assets invested in financial markets but nothing like the current level (about $13 billion), nor that currently projected by 2019 (about $24 billion).

With respect to the NZSF, Littlewood (2010) suggests that it does not add to the security of future pensioners' benefits but rather raises a serious investment risk for taxpayers when the government's financial statements are looked at in a 'total accounting context'. It is therefore not needed and New Zealand Superannuation should instead be run on a pure PAYG basis. *PensionBriefing 2010-6* (Littlewood 2010) updated the calculations to 30 June 2010 and concluded that the presence of the NZSF had cost New Zealand taxpayers an accumulated $1.8 billion by comparison with simply repaying debt with the contributions that had been made to the NZSF[3].

This *PensionCommentary* describes the issues relating to the pre-funding of the EQC in the context of the government's overall budget and risk management, and recommends a change to the way in which the EQC and the government manage their finances. There are some similar issues, by comparison with the ACC and the NZSF, but enough about the EQC's role that warrants particular attention. That was the position before the Canterbury earthquakes over the last 12 months. Those have simply highlighted the issues raised in all three commentaries.

2. The EQC's Fund

At 30 June 2010 (the most recent date for which full accounts are available), the EQC had $5.97 billion in what its accounts call 'financial instruments'. These are managed by the EQC though, as explained later, the EQC's overall investment strategy is in fact set by the government. The position has changed dramatically during the year ending 30 June 2011 because of the Canterbury earthquakes. This *PensionCommentary* examines the issues, first as if the EQC still had those investments (that is, before the earthquakes) and then looks at the implications of subsequent events.

3. The history of the EQC Fund

The EQC was established in 1945, initially to provide cover for just earthquakes and war damage. That was eventually extended to cover natural disasters while cover for war damage was dropped. The EQC is now a Crown Entity as that expression is defined in the Crown Entities Act 2004 and its 'parent' is the New Zealand government.

The EQC calls its financial assets the 'Natural Disaster Fund'. Those assets are available to meet claims "…from the following types of hazard: earthquake, natural landslip, volcanic eruption, hydrothermal activity and tsunami, as well as fire caused by any of the above" (Earthquake Commission 2010, p. 31).

Over the eight years 2003 to 2010, the financial assets grew from $4.05 billion to $5.97 billion. In summary, the growth has come from excess 'premiums over claims' during the eight years as well as from the investment returns earned on those assets. By far the

[3] Based on (unaudited) press releases since 30 June 2010, it seems that the accumulated deficit at the end of 2010 will have reduced.

larger contribution came in 2010 from investment returns. The 2010 surplus from underwriting activities was $1.6 million (2009: a loss of $9.6 million). By contrast, the surplus from investment income in 2010 was $376.8 million (2009: $68.4 million) though, as the EQC Annual Report (2010, p. 27) pointed out:

> Investment income exceeded budget [$312.4 million] this year [2010] due to an increase in New Zealand Government stock values as a result of a fall in average yields. While equity returns were better than budget in foreign currency terms, these gains were substantially offset by exchange losses due to the strong New Zealand dollar.

Until 2001, the EQC's financial assets were invested in just New Zealand-domiciled fixed interest investments, principally New Zealand government stock. Since that date other investments have been introduced so that the exposure to New Zealand government stock had reduced to 81% in 2002 and 69% in 2010. From November 2001, at the government's direction, international shares were added to the portfolio. From 12.9% of the total portfolio in 2002, they had grown to 28.2% by 2010. According to the EQC:

> The objective of this move was to ensure the Commission holds assets outside the region that will be affected by a major financial disaster…..Investment in equities is kept within a range of 27-33 percent of the Commission's total portfolio. (Earthquake Commission 2010b)

The financial assets are not the only resources available to the EQC to meet the cost of claims. The EQC also holds reinsurance cover of about $2.5 billion as of 30 June 2010 (Earthquake Commission 2010, p. 7)

The EQC itself can never be insolvent if claims ever exceeded its assets. That is because it can call on the government to meet any excess. As the EQC itself says:

> In the event of the Commission's liabilities exceeding its assets (including reinsurance) the Crown, under section 16 of the Earthquake Commission Act 1993, is obliged to provide, by way of grant or advance, sufficient funds to meet the shortfall. (Earthquake Commission 2010, p. 27)

The EQC pays the government an annual premium in respect of this contingent liability. The premium was $10 million in both 2009 and 2010. The Minister of Finance fixes this under section 17 of the Earthquake Commission Act 1993.

4. The EQC's 'financial instruments'

Table 1 summarises the EQC's financial assets over recent years.

Table 1: EQC's financial assets by sector – 2007 to 2010

$ billion	2010		2009		2008		2007	
	$	%	$	%	$	%	$	%
NZ Govt. securities	$4.14 bn	69.3%	$3.75 bn	66.9%	$3.74 bn	55.8%	$3.56 bn	65.3%
NZ Banks/T bills	$0.14 bn	2.5%	$0.25 bn	4.4%	$0.25 bn	4.4%	$0.25 bn	4.5%
Overseas shares	$1.64 bn	28.2%	$1.61 bn	28.7%	$1.59 bn	28.6%	$1.65 bn	30.2%
Total	**$5.97 bn**	**100.0%**	**$5.61 bn**	**100.0%**	**$5.59 bn**	**100.0%**	**$5.46 bn**	**100.0%**

Note: information is derived from the notes in each of the annual reports.

Table 1 shows that, at the end of the 2010 year, more than two thirds of the 'Natural Disaster Fund' comprised New Zealand government securities. At 30 June 2010, most

(83%) of that holding was in government stock, 13% was in inflation-indexed stock and up to 4%[4] was in short-term Treasury bills. The EQC noted that:

> The Commission passively manages its Government stock portfolio. This means the portfolio is exposed to an interest rate risk identical to the New Zealand Government stock index. (Earthquake Commission 2010, p. 28)

Of the overseas shares, 60% are actively managed and the other 40% passively managed.

Although the accounts value government stock holdings to reflect current interest rate movements, the EQC has a special arrangement with its owner, the government:

> In the event of a major catastrophe, the NZDMO [New Zealand Debt Management Office – a department of the Treasury] has agreed to buy back the Commission's Government stock at pre-catastrophe levels. (Earthquake Commission 2010, p. 28)

The logic of these arrangements, from both the government's and the EQC's position, is considered later.

5. Setting the EQC's investment strategy

The EQC in fact has little discretion about the way in which the assets of the 'Natural Disaster Fund' are invested. Ministerial directions under section 12 of the Earthquake Commission Act 1993[5] set the permissible limits and the following summarises the government's current instructions.

The EQC is obliged to invest in government securities, global equities (a maximum of 35%) and highly rated bank certificates of deposit (a maximum of $2 billion, spread "across a number of banks").

The maximum in respect of bank deposits was recently increased, presumably to allow for the cash requirements to settle Canterbury claims. The previous "policy application"[6] of the predecessor ministerial direction saw a target 7% of assets (ranging from 0% to 12%) invested in New Zealand cash investments. That now seems to be set to a maximum of about 33% ($2 billion). The target allocation to global equities had previously been set at 30% (range 27-33%) and so government securities previously had to be the remaining 63% (about $3.7 billion before the Canterbury earthquakes).

6. Accounting for the government's activities

The government's Budget Economic and Fiscal Update ('BEFU') (The New Zealand Treasury 2010) of 20 May 2010 shows how the EQC affected the government's financial position in 'normal' times: that is before the Canterbury earthquakes of 2010/2011. The 2011 BEFU, examined later, shows the impact of that catastrophe on the government's accounts.

In 2010, the BEFU forecast the "Total Assets" as of 30 June 2010 (including accruals) for the government as a whole at $226.51 billion. Of that, $6.4 billion was in respect of the EQC (The New Zealand Treasury 2010, Note 12, p. 135). Total liabilities, on the other hand were $130.03 billion, of which only $86 million was in respect of the EQC.

---

[4] The annual report does not provide a split of the 'NZ banks/T bills' short-term asset category between Treasury Bills and the rest.

[5] That is accessible here.

[6] Accessible here.

The government's estimated 'net worth' at 30 June 2010 (before the earthquakes) was, according to the 2010 BEFU, $96.48 billion.

The EQC'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 or, as with earthquake claims, the consequential losses associated with a natural disaster.

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.

7. 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 EQC.

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 EQC has therefore no apparent need to maintain a pool of invested assets to pre-fund its expected, contingent future obligations. Taxpayers end up paying about the same whether the EQC builds up financial assets ahead of a serious claim from, amongst other things, premiums collected over a period, or whether claims are met directly at the time. The cost of a major disaster is the claims paid and that is unaffected by the source of the EQC's money.

Neither does the government need to undertake 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? The EQC itself seems not to think so. In Note 13 to the 2009-2010 accounts, it stated, after reciting the government's potential obligation to meet excess claims under the "Crown Guarantee":

> Whilst the ability of the EQC to meet its claims liabilities is therefore in no doubt, the Commission is required to perform a liability adequacy test to determine whether the carrying amount of the unearned premium liability is sufficient to cover estimated future claims relating to existing contracts. This test and the resulting liability adjustment are performed solely to ensure compliance with NZ IFRS 4 – *Insurance Contracts*. As this standard is intended for general insurers and does not provide for the Commission's unique circumstances, the result should not be read as an accurate indicator of the adequacy of its premiums. (Earthquake Commission 2010, p. 31)

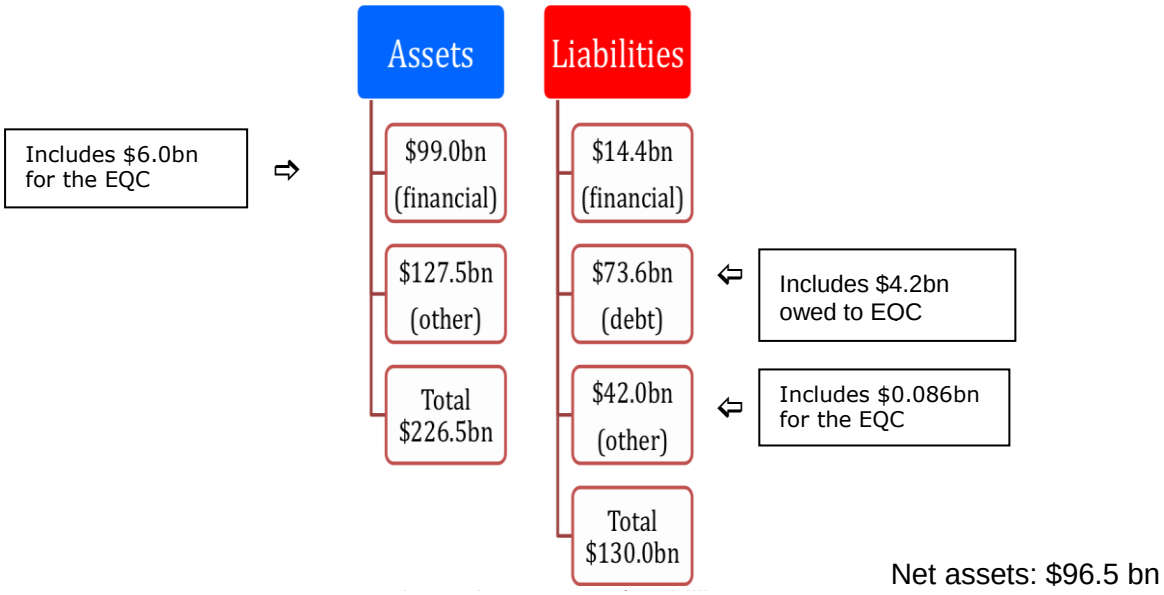
The EQC is right about this and it is interesting to note the difference between the EQC's and the ACC's attitudes to this issue. In the latter case, the so-called deficit that has apparently dogged the ACC over recent years is because of its aim to comply with NZ IFRS 4 – *Insurance Contracts* that was designed for private insurance providers *PensionCommentary 2009-1* suggested that the accounting standard was an inappropriate measure of the ACC's long-term position.

8. Having the EQC's Fund runs an investment risk

The EQC's 'Natural Disaster Fund' as of 30 June 2010 was a lot less real than might appear. As Table 1 has shown, about 70% of the 30 June 2010 assets were loans to the government. Only the remaining 30% was externally invested in private markets.

Chart 1 summarises the government's overall financial position in May 2010 (The New Zealand Treasury 2010).

Chart 1 Summary from the Budget Economic and Fiscal Update 2010 (pre-earthquakes)



Source: author's calculations based on BEFU 2010 numbers.

When the accounts for 'New Zealand Limited' are consolidated for accounting purposes (following on from Chart 1), the overall position in 2010 was that the EQC fund added about $6.0 billion to the assets and about $4.2 billion to the liabilities, a net asset of about $1.8 billion.

Because about 70% of the EQC's fund is, in fact, loans to the government, there is no net investment risk as measured in terms of the 'total accounting context' described with respect to the NZSF in Littlewood (2010). At any date, the face value of liabilities in the EQC's accounts is exactly equal to the face value of the liabilities in the government's overall accounts. As interest rates change, the market value of the assets and liabilities move together[7]. Consolidating the government's accounts should see both the asset and liability cancel each other out.

[7] There is a potential discontinuity between the government's and the EQC's accounts in this regard. The EQC uses market values at balance date and the government takes those values into its own accounts. However, the government's overall debt is measured at face values. If interest rates fell, there would be a nominal profit to the government; the reverse would apply if interest rates rose.

However, the money invested by the EQC in external investment markets (about $1.8 billion at 30 June 2010[8]) is in a different category. The logic of the EQC's strategy with respect to this holding is questioned later. We first analyse the risk to the government's own accounts.

Table 2 summarises the EQC's reported investment performance results for the eight years to 30 June 2010.

Table 2: EQC Fund's investment returns by sector (from the annual reports)

	2010	2009	2008	2007	2006	2005	2004	2003
NZ Govt. stock	7.9%	9.8%	9.1%	1.8%	5.2%	8.1%	1.7%	11.8%
NZ Govt inflation bonds	9.9%	11.9%	5.2%	2.6%	6.2%	11.5%	(0.4%)	22.8%
NZ Banks/ T bills	2.7%	5.9%	8.6%	7.7%	7.4%	6.7%	5.4%	6.0%
Overseas shares passive	4.1%	(16.6%)	(9.1%)	(2.1%)	33.5%	0.0%	13.0%	(18.4%)
Overseas shares active	4.5%	(19.2%)	(7.7%)	(4.0%)	36.7%	(note)	(note)	passive

Note: Overseas shares were managed passively until 31 October 2003. An active portfolio gradually increased until August 2004. Now both styles are used (60% active; 40% passive at 30 June 2010).

Table 3 shows the average annual returns by sector, as reported by the EQC.

Table 3: EQC Fund's average annual investment returns by sector

	2002-10	Notes
NZ Govt. stock	6.87% p.a.	8 years: 1 July 2002-30 June 2010
NZ Govt inflation bonds	8.51% p.a.	8 years
NZ Banks/ T bills	6.29% p.a.	8 years
Overseas shares passive	(0.63% p.a.)	8 years but with some active shares 2003 to 2004
Overseas shares active	0.45% p.a.	5 years: 1 July 2005-30 June 2010

Notes:

1. Source: author's calculations based on data extracted from the EQC's reports.
2. Overseas shares were managed passively until 31 October 2003. An active portfolio gradually increased until August 2004. Now both styles are used.

The government is currently meeting fiscal deficits by borrowing. With respect to the money that the EQC has invested in CDs with banks and in overseas share markets (about $1.8 billion at 30 June 2010) the government must assume that the return on those external assets 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 2021) is currently about 4.5% per annum. In order for the government to justify the existence of the external investments in the EQC Fund as part of its overall activities, the managers of the EQC Fund must achieve at least 4.5% a year before the government as a whole is better off financially[9]. As the government's cost of debt changes, so too does the hurdle rate.

[8] We do not know what proportion of the combined Government Treasury Bills and short-term bank certificates of deposit (CDs) sector is in the latter group. As the Treasury Bills are loans to the government, there is no overall investment risk. The same is not true of the CDs.

[9] There is a case to suggest that the 'hurdle rate' should be after-tax; at present 3.25% a year for a 28% taxpayer. That's because the government pays interest of 4.51% 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 4 shows that, over the last eight years, the EQC's managers have failed by a considerable margin to reach the hurdle rate on both parts of the overseas shares' portfolios.

Table 4 shows a year-by-year comparison for the last 8 years.

Table 4: Overseas shares compared with the hurdle rate – 2002-2010

Year ending 30 June	EQC Fund's returns		Hurdle rate (Note 1)
	Overseas shares - passive	Overseas shares - active	
2003	(18.4%)	Note 2	6.66%
2004	13.0%	Note 2	5.36%
2005	0.0%	Note	6.31%
2006	33.5%	36.7%	5.72%
2007	(2.1%)	(4.0%)	5.85%
2008	(9.1%)	(7.7%)	6.71%
2009	(16.6%)	(19.2%)	6.35%
2010	4.1%	4.5%	5.96%

Notes:

1. The hurdle rate is the yield on 10 year government stock at the 30 June immediately before the start of the year. For a proper comparison with the EQC Fund's return, the hurdle rate should be the average for each 12 month period.
2. For 2003 and 2004, the overseas shares holdings started at 100% passive but finished with a mix of passive and active. Currently, the mix between the two over the total of overseas shares is 60% active and 40% passive.

Over the *8 years* 2002-2010, the average hurdle rate at 30 June before the start of each year was 6.11% a year. Based on the average annual returns reported in Table 3, the returns for the two share portfolios missed the hurdle rate by 6.74% a year for passive and 5.67% a year for active (note that these are for eight and five years respectively).

The EQC has just managed to pass the hurdle rate for the Treasury Bills/CDs portfolio but, as we do not know what the returns were on the external CDs, we cannot calculate whether the government has lost money on those in the total accounting context. If, generously, we assume that the NZ bank CDs/Treasury Bills were all in externally invested CDs, the eight-year average return of 6.29% p.a. was ahead of the hurdle rate by only 0.18% a year. Adding any Treasury Bills to that assumption will probably mean that this category of the EQC's financial investments also missed the hurdle rate over the whole eight years.

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

As stated in our earlier *PensionBriefings*, we should question whether governments can add value to the portfolio investment business. Based on the performance numbers in Tables 2 to 4 above, 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. Because of poor share market returns over the eight years covered in the above analysis, leverage has increased the cost of the EQC's investment strategy to the government in a way that is not measured directly in either the EQC's or the government's accounts.

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 invest in CDs issued by banks is 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 return[10].

That conclusion on its own undermines the case for maintaining the EQC Fund. It is simply a risk that the government does not need to run[11].

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 contributions to the EQC Fund is, because of the accounting consolidation illustrated in Chart 1, effectively (not actually) a dollar borrowed.

The same also applies to any assets still held in the EQC Fund – new borrowing by the government in the presence of the assets held by the EQC Fund is the same as borrowing to invest. That's because the government has a choice – it can maintain say, $1 million of invested assets in the EQC Fund with higher borrowing or it can sell $1 million of those investments and not have to borrow.

9. A circular investment trail contributes nothing to security

One aspect of the current arrangements illustrates a conceptual flaw in the way the EQC Fund relates to the accounts of its 'parent' – the New Zealand government.

Most of the EQC Fund is lent to the New Zealand government or, more accurately, constitutes ownership of New Zealand government debt securities. Of the $5.97 billion in the EQC Fund at 30 June 2010, 69.3% was in government bonds while part of the 2.3% in bank CDs and Treasury Bills was also lent to the government.

The logic of the government's issuing debt securities to the EQC Fund seems, at best, circular. When looking at the BEFU numbers in Chart 1, approximately $4.3 billion should be deducted, first from the 'financial assets' (because the government doesn't 'own' an asset comprising debt that it issues itself) and secondly from the $76.3 billion shown as "debt" (because the government 'owes' that $4.3 billion to itself).

That this arrangement contributes nothing to the overall security of the EQC's customers is reinforced by two points already noted:

- when the EQC needs cash to meet claims, it can only sell the government bonds back to the government:

[10] Over the 8 years 2002-2010, the average yield on all New Zealand government stock (including interest rate driven gains and losses) was 6.90% p.a. (0.79% 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 6.66% at the start of the period to 5.35% at the end (Source: MCA NZ Limited, actuaries).

[11] Much the same arguments apply to the New Zealand Superannuation Fund and the ACC as already cited.

> In the event of a major catastrophe, …[the Treasury] has agreed to buy back the Commission's Government stock at pre-catastrophe levels. (Earthquake Commission 2010, p. 28)

- The EQC cannot become insolvent because, under section 16 of the Earthquake Commission Act 1993, the government is obliged to meet any shortfall.

The EQC itself is not responsible for this 'circularity'; the government sets the rules:

> A direction from the Minister of Finance was issued on 1 November 2001 permitting investments to be held in New Zealand government securities (New Zealand Government stock, inflation-indexed stock and Treasury bills), New Zealand bank securities (maximum $250 million) and global equities up to a maximum of 35% of total investments. (Earthquake Commission 2010, p. 28)

In practice, therefore, there seems no need to continue the pretence that the EQC Fund, before September 2010, had significant, never mind *sufficient* resources to meet the cost of a catastrophe. Aside from the assets invested overseas (more on those below) and in bank-issued CDs, the EQC's claimants will depend, in fact, on the government's financial capacity to cover the cost of the EQC's claims.

This 'circularity' might explain a comment from the EQC's chairman in the 2009-2010 annual report. He first recognised the circularity issue and concluded:

> It may now be timely to look at a different balance between the Fund and reinsurance and, for the Fund itself, a different balance between New Zealand Government stock and other investments. (Earthquake Commission 2010, p. 7)

We agree with that assessment and it seems the government itself may be thinking about the same issues. The 2010 position with regard to $4.3 billion of the 'Natural Disaster Fund' (about 70% of the total fund) was nothing more than fiscal window dressing.

10. The EQC's investment strategy

If, as this *PensionCommentary* suggests, the EQC Fund did not have any externally-invested assets, how might it meet any serious level of claims? There are two possibilities:

a) **Government promissory note:** One approach, with respect to the amounts currently lent to the government could see the government issuing the EQC a promissory note that gave a formal commitment to meet all the EQC's liabilities as they arose. That document would have the same economic effect as the government bonds currently owned by the EQC, after those are removed from both the government's assets and liabilities post-consolidation. A promissory note would remove the accounting liabilities from the EQC's accounts and obviate the need for a fund of any kind. As now, the ultimate financial strength underpinning the EQC is the government's future capacity to tax and set levies; also the fact that the EQC's 'owner' (the government) will never disappear[12]. The suggested promissory note would simply reinforce, not change, that connection.

b) **Inter-government agreement:** The difficulty with the promissory note possibility is that, in order to meet its commitments at the time of a major claim,

[12] This is the effect of the current arrangements under the Earthquake Commission Act 1993. Section 16 of that states: "If the assets of the Commission (including the money for the time being in the Fund) are not sufficient to meet the liabilities of the Commission, the Minister shall, without further appropriation than this section, provide to the Commission out of public money such sums by way of grant or advance as may be necessary to meet the deficiency upon such terms and conditions as the Minister determines."

the government would probably have to borrow in markets that might be negatively affected by the catastrophe that prompted the claims. That, in substance, is the present position. To avoid that, two governments (say, Australia and New Zealand) could agree to lend money to the country suffering the loss at pre-catastrophe rates. The terms of that arrangement could mimic a private reinsurance agreement (triggered by claims of an agreed multiple of expected claims with limits on the total lent in any year etc.). The true cost in the New Zealand government's accounts of the agreement with, say, Australia will only be the difference between market interest rates at the time of the loans to Australia and the prevailing rates before the catastrophe that gave rise to the unexpected claims in Australia. That cost arises because of the accounting rule that requires interest-bearing securities to be marked to market.

It is highly unlikely that claims of a catastrophic scale would happen in the same year to the two countries. That will give each country needed risk diversification.

11. The EQC's investment strategy

The 'circularity' issues noted in paragraph 9 aside, there are further reasons to investigate the reason for having the EQC Fund and what that might mean for its investment strategy.

There are two separate issues here:

a) Self-investment

We have already questioned the logic of having any money invested in securities that are issued by the New Zealand government itself (the circularity issue). There is a stronger, investment-based reason for avoiding what in other environments would be labelled 'self-investment'.

The EQC needs to be able to realise assets to meet claims that exceed the premiums collected in any year (net premiums in 2010 were only $86.8 million). It can do that through the promissory note strategy suggested in paragraph 10 above and ask the government to meet the excess. However, the risk to the government is that it may have to borrow to meet those claims, just as it must do now to meet the consequences of the Canterbury earthquakes. Depending on the scale of the earthquake or other natural disaster, markets may increase the cost of those loans to the government because of the increased risk they see New Zealand's economy facing as result of the disaster.

The fact that about 70% of the EQC's assets at 30 June 2010 were securities that the EQC had the right to 'put' to the government (requiring the government to borrow to meet its obligations to buy them back) means that the EQC's investments are 'infected' by the risks they were intended to protect the EQC from. The EQC itself can argue that it is protected because the government must buy the government stock back at pre-catastrophe prices. However, that simply shifts the risk from the EQC to taxpayers. It does not deal with the 'self-investment' risk.

Any investments in the New Zealand market (either public or private) suffer from the same potential 'self-investment' risk[13]. That risk is recognised by the EQC itself. In explaining why there are any overseas investments in the Natural Disaster Fund', the EQC states:

> In late 2001…. the Commission started to invest in international equities. The objective of this move was to ensure the Commission holds assets outside the region that will be directly affected by a major natural disaster. (Earthquake Commission 2010b)

That statement should apply to the whole of the EQC Fund, not just the 28% (at the end of 2010) invested in overseas shares. If there is to be any sort of EQC Fund, there is only one possible way that it should be invested – in markets that are unlikely to be affected by the disaster that has precipitated the need to realise them. That means 'outside New Zealand'.

b) Investment horizon

The other significant investment strategy issue concerns the very existence of the overseas shares portfolio. As already described, the whole of any EQC Fund should, for the reason stated by the EQC itself, be invested overseas. The next question is whether that overseas investment should be in shares.

Leaving aside the 'borrowing to invest' issue described in paragraph 8 above, the only reason the EQC might need a pool of assets to call on would be to meet claims that, in a year, exceeded the premiums collected. If that happened, the EQC would need relatively quick access to the required amount. As stated in paragraph 10 above, the easiest approach would be to ask the EQC's 'parent' (the government) for a cheque. However, if that were not acceptable, the EQC should have money that it can call on. The EQC's own *Statement of Investment Policies, Standards & Procedures* recognises that need:

> **Liquidity of assets**
> The uncertain nature of the liabilities creates a need for a portion of the Fund to invest in highly liquid assets, but given the likely time to draw all funds following a major event, it does not totally prohibit the Fund from holding some less liquid investments. (Earthquake Commission 2009)

If the EQC Fund is to maintain a true liquidity fund, that should preclude the second part of the quoted policy ("holding some less liquid investments").

In fact, even in the pre-Canterbury earthquake environment, the presence of international shares in the EQC's portfolio seemed anomalous, as events have demonstrated. The only justification for the whole EQC Fund's existence is, as stated by the EQC itself:

> This is intended to meet a substantial part of the rebuilding costs following a major earthquake, or other natural catastrophe, in New Zealand, an event which will certainly happen at some time. (Earthquake Commission 2009b, p. 4)

[13] True 'self investment' means that the fund manager is buying investments in the sponsoring body. In the EQC's case, that applies to the government bonds and Treasury bills. We suggest that for the EQC, 'self investment' has a wider meaning and covers any investments in New Zealand.

It is true, as the EQC says[14], that international shares of the kind held in the EQC Fund can be liquidated quickly but that is not the point. If there is a major claim that requires the whole of the EQC Fund to be realised, that may be just the time when international share prices are depressed and below their long-term values. The EQC would, however, have no choice about selling them, perhaps at a loss to purchase price values.

A general principle of investing is that assets that might have volatile prices (such as shares) should be held for the long-term; that is over a 10-15 year horizon. Over that period, the chances of *having* to sell them are significantly reduced, if not eliminated. Volatile assets should not be in the part of the portfolio that may need to deliver cash over the next 1-10 years. The cash and bond-style investments are the appropriate holdings for that shorter timeframe (cash for the most immediate needs; bonds for obligations over the medium timeframe). That 'rule' applies as much to individual investors as to institutional investors like the EQC. Under this framework, by definition, the EQC Fund can never be a long-term investor, no matter how long it holds a particular asset, as recent events have illustrated clearly.

It is also true, as the EQC says[15], that having shares in a portfolio, may produce potentially volatile results over the short-term but should "…enhance returns over time." However, that seems not to be a relevant consideration for the EQC for the reason just stated. In fact, if the share portfolio performs its expected role, it can be justified only on the basis that it improves the overall long-term returns for the EQC Fund and, impliedly, that it protects New Zealanders against future increases in premium rates.

So the overseas shares are not really about shifting part of the investment risk outside the disaster-affected investment markets; nor are they really about providing liquidity to meet claims. They are in fact about improving the EQC Fund's returns over the long-term (more than 10 years). Given the government's 'total accounting context' discussed in paragraph 8 above (the EQC's share portfolio is effectively 100% leveraged), the potential to achieve that objective, from the government's perspective, seems at best questionable.

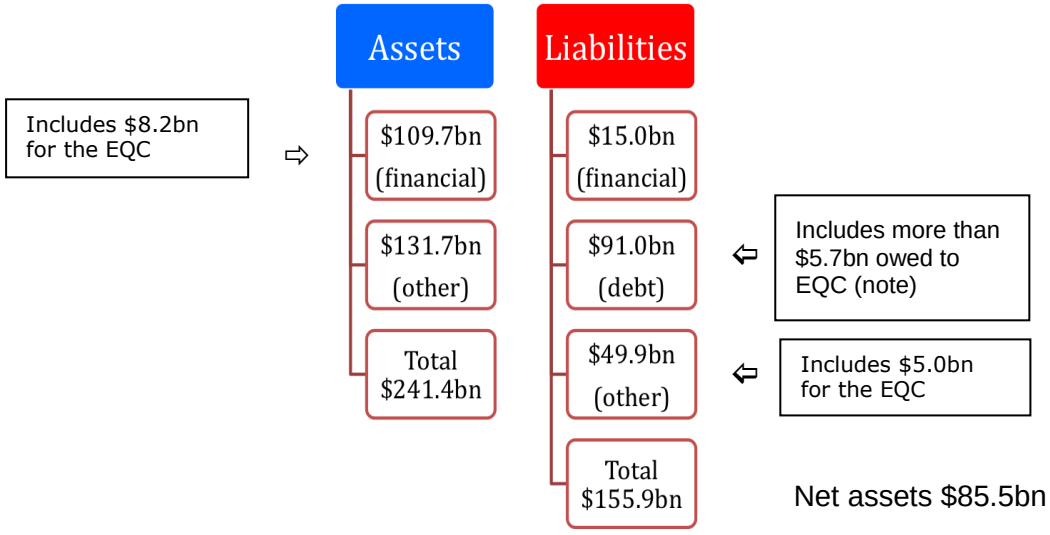
12. After the earthquakes: 2010-2011

Everything changed both for New Zealand and for the EQC in the 2010-11 year just completed. The EQC's annual report for that period will not be available until October 2011 but we can obtain some idea of the potential impact on the EQC Fund from press statements and from the government's Budget Economic and Fiscal Update 2011 (The New Zealand Treasury 2011).

[14] On the EQC's website here: http://www.eqc.govt.nz/abouteqc/investmennofndf/inv-faq.aspx
[15] http://www.eqc.govt.nz/abouteqc/investmennofndf/sipsp.aspx#anchor_7

Chart 2 updates the government's position for 2011 as shown above in Chart 1 for 2010.

Chart 2 Summary from the Budget Economic and Fiscal Update 2011 (post-earthquakes)



Source: author's calculations based on BEFU 2011 numbers
Note: In the absence of the EQC's 2011 accounts, the $5.7 billion shown as the amount the government owes is an estimate. For the reason explained below, there might have been a significant transfer from the government to the EQC since 30 June 2011.

Chart 2 shows a dramatic shift from BEFU 2010 that Chart 1 summarises. They are caused by a combination of the global financial crisis and the Canterbury earthquakes.

The 'headline' changes are as follows:

- There has been a fall in the government's net worth from $96.5 billion in 2010 to $85.5 billion in the latest estimate (down by $11 billion or 11.4%).
- Gross assets have grown by 7% but gross liabilities have risen by 20%.
- The EQC's assets have grown substantially (from $6.0 billion to $8.2 billion[16]).
- The EQC's estimated liabilities (in May 2011) have gone up by $4.9 billion. In the last few months, that position has worsened. A government press release dated 30 August 2011 (available here) stated "The Earthquake Commission (EQC) has increased its estimated Canterbury earthquakes liability by about $4 billion to $7.1 billion….". It added: "The Government, through its guarantee under the Earthquake Commission Act, will meet any shortfall [in the EQC's accounts]".

In summary, the EQC will have to realise most, if not all, of the assets in the EQC Fund. Not only will the government have to buy back all of the existing government bonds and Treasury Bills but it will also have to meet claims made to the EQC in excess of its assets. So, when the EQC announces that it "is selling down its $3.1 billion of government bonds, taking advantage of the strongest prices since early 2009, to fund settlement of claims from the Christchurch quakes"[17], there was actually much less than

[16] That may have been by way of a transfer from the government's accounts to the EQC. Alternatively, reinsurance arrangements may have contributed to the increase. We will not know this until the EQC's 2011 accounts are released.
[17] As reported in the *Dominion Post*, 9 September 2011.

the EQC implied to this decision. It has no choice because the whole of the EQC Fund is needed to meet claims and it must sell those bonds back to the government.

At the end of that process, the EQC Fund will have been exhausted. We suggest that it should not be reinstated.

13. Credit ratings of the EQC and its 'parent', the government

Given New Zealanders' dependence on the strength of the government's promise both with respect to 'taking back' the government securities held by the EQC and also meeting its commitment to pay any shortfall, it seems incomprehensible that the EQC has a higher investment rating than the government itself:

> "The Earthquake Commission (EQC) has welcomed news from one of the world's leading international credit rating agency, Standard and Poor's, that it has affirmed EQC's AAA rating. Standard & Poor's said today that EQC's AAA financial strength and corporate credit rating is in good health. EQC Chief Executive Ian Simpson said receiving support from Standard & Poor's was important. "AAA is the highest possible credit rating, and this will give people confidence that EQC can, and will, meet all its commitments around the Canterbury earthquakes."[18]

The government's own Standard & Poor's rating is AA, below that of its wholly-owned 'subsidiary', the EQC. That makes no sense.

14. Private sector GAAP inappropriate for the government

The final point concerns the application to the government's annual accounts of 'generally accepted accounting practice' (GAAP) as those standards apply in the private sector.

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 New Zealand Treasury 2005, p. 8)

The most obvious objection to this justification is that, with regard to the EQC at least, there are no equivalent "reporting entities" in New Zealand or elsewhere that need comparing.

In addition, this *PensionCommentary* suggests that the government is actually increasing its operating risks by having the EQC Fund (and adding to it) while at the same time it is raising debt to finance its other activities. We have also demonstrated that there is much less substance to the Fund than first appears. More than 70% of the EQC 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 EQC and secondly, the government itself. The point of having

[18] As posted on the EQC's own website here.

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 2004)[19]. 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;... (Institute of Chartered Accountants of New Zealand 2004, p. 16)

Nowhere in NZ IFRS 4 is there any reference to the special position we have described for an organisation like the EQC. The only reference to earthquake-related premiums relate to a 'mechanical' provision (clause 4.2.2).

As noted, the EQC itself does not place much store on complying with NZ IFRS 4 (see paragraph 7 above). We are therefore pleased to note that the new body charged with the development of accounting standards in New Zealand – the External Reporting Board[20] ('XRB') will be looking at the development of "Accounting Standards Framework for General Purpose Financial Reporting by Public Benefit Entities."

The XRB issued consultation papers on 14 September 2011 that raise a distinction between 'Public Benefit Entities' (the government and charities, amongst others) and 'For-Profit Entities'.

15. In conclusion…. de-leveraging the government's balance sheet

If the government accepted the conclusions of *PensionCommentary 2009-1* (with respect to the ACC), Littlewood (2010) with respect to the New Zealand Superannuation Fund and this *PensionCommentary*, approximately $35 billion worth of financial assets could be realised and used to reduce the government's reported debt of about $91 billion (The New Zealand Treasury 2011). That would reduce the government's total liabilities from $155.9 billion to $120.9 billion as at 30 June 2011. It would not, however, change the government's net assets. They would remain at the $85.5 billion estimated in BEFU 2011.

However, it would reduce the leverage in the government's balance sheet from the 65% shown in BEFU 2011 ($155.9 billion in liabilities to $241.4 billion in gross assets) to an estimated 59% ($120.9 billion to $206.4 billion). It would also reduce risk by eliminating the current fully leveraged exposure to financial markets.

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

[20] An "independent Crown Entity, established under section 22 of the Financial Reporting Act 1993, and subject to the Crown Entities Act 2004" (see here)

For comments on this *PensionCommentary* and for further information please contact:

Michael Littlewood
Co-director, Retirement Policy and Research Centre
University of Auckland
Private Bag 92 019
Auckland 1142
New Zealand

E Michael.Littlewood@auckland.ac.nz
P +64 9 92 33 884 DDI
M +64 (21) 677 160
http://www.rprc.auckland.ac.nz

References

Earthquake Commission (2009). Statement of Investment Policies, Standards & Procedures.

Earthquake Commission (2009b). Annual Report 2008-2009.

Earthquake Commission (2010). 2009-2010 Annual Report.

Earthquake Commission (2010b). Investment of the Natural Disaster Fund.

Institute of Chartered Accountants of New Zealand (2004). The New Zealand Equivalent to International Financial Reporting Standard 4.

Littlewood, M. (2009) Why does the Accident Compensation Corporation have a fund? PensionBriefing 2009-1

Littlewood, M. (2010). "Pre-funding a government's future financial obligations - the New Zealand Superannuation case study " New Zealand Economic Papers **Volume 44** (Issue 1 April 2010): 91 - 111.

Littlewood, M. (2010). "Updating the NZSF investment performance numbers." PensionBriefing 2010-6.

The New Zealand Treasury (2005). A Guide to the Public Finance Act.

The New Zealand Treasury (2010). Budget Economic & Fiscal Update 2010.

The New Zealand Treasury (2011). Budget Economic & Fiscal Update 2011.