Funding: is there a happy compromise?

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Introduction

- Michael has laid out a convincing case for PAYG
- Still some issues – primarily political –
  - See “The rationale for pre-funding ACC”, St John (2009)
- Asked to address:
  Is there a happy compromise?
  What are the merits of
  - the intergenerational equity argument
  - a moderate approach to reserves
ACC says one of the benefits of full funding is "It will mean today’s generation will pay for its injury costs, and not pass a debt for those costs on to future generations."

- But every generation both inherits some costs and passes some on (like us!)
- Intergenerational problem occurs if the resulting net burden is excessive
The intergeneration argument

What could lead to excessive intergenerational burden?

- Rising claims/costs?
  - No – if they continue to rise, next generations will continue to pass on more than they inherit
  - FF helped by investment returns
  - PAYG helped by rising population, economic growth to share past costs
  - Very little difference between PAYG and FF
  - All else equal, the faster costs rise, the better PAYG looks
  - Problem is rising costs, not pass-on
The intergeneration argument

- But we’d hope to reduce accident numbers and severity
  - Arguably a “burden” – next generations would be passing on less than they inherit
  - FF looks better than PAYG
  - But reducing burden
The intergeneration argument

What else could lead to excessive intergenerational burden?

- Changing demography – ageing?
  - But half the cost of ACC is weekly compensation – few retired people are paid it
  - 2007-2009 less than 8% of the costs of the scheme for people 65 or over (17% of active claims)
  - Many of their claims not fully funded anyway (Non-Earners’ Account)
  - Outcome not obviously a problem
The problems to address

1. Political

Long history of politicians and businesses attacking the ACC alternately for either
- Having huge liabilities and hence “in crisis”; and
- Having unaffordable levies

Possible solution: reserves, levy smoothing
- Levy smoothing already happening
The problems

2. Natural Disaster

- Cost of Christchurch earthquakes at 24 April 2011 was estimated at $200 million
  - Only $2.5m paid out at that stage
- ACC/GNS estimate 2010: ACC cost of Wellington magnitude 7.5 earthquake: $275m
  - Overall drop in the funding ratio of 0.9%.

- Possible solution: reserves
- But is it material?
Reserves

- Need some reserves even with pure PAYG
  - Timing of revenue, payments
  - Smoothing
  - Emergency

- But main problem is perception of crisis
3. Perception of crisis

- Large accounting-based net liabilities – either dollar value or relative
- Need for major changes in levies
- Calculation of liability is reliant on estimates (guesses) which can be highly variable
Movement in estimates of outstanding claim liability

ACC Financial Condition Report 2010, Graph 4.4, p. 24
These changes due just to changes in assumptions

Assumptions about

- Inflation in cost of medical and rehabilitation services
- Injury and recovery rates
- Discounting methodology
- Investment returns
- Providing for risk (NZ IFRS - 2008)

Likely to be further changes
Sensitivity

Impact on net surplus of +1% or -1% change in assumptions ($million)

For comparison: Revenue
Claim costs
Discount rate
Inflation rate
Long-term real rate of return
Superimposed inflation (1)
Discounted mean term
Superimposed inflation (2)
Long-term continuance rates

(1) excluding social rehabilitation for serious injury claims  (2) for social rehabilitation for serious injury claims after four years
Sensitivity

Effects of changes in assumptions and circumstances on ACC's claims liability 2009 ($000)

- Changes in economic assumptions: 1,406,958
- Changes in risk margins
- Claims experience and modelling: 1,587,520
- Payments experience: 1,496,177
- Legislative changes
- Aging of previous year claims: 1,170,294
- Increase in claims anticipated over the year: 3,514,641
- Claims recognised in accounts: 9,175,590
- Actual claims and handling costs for year: 3,395,697
Sensitivity

Effects of changes in assumptions and circumstances on ACC's claims liability 2010 ($000)

-2,000,000 0 2,000,000 4,000,000

<table>
<thead>
<tr>
<th>Factor</th>
<th>Effect (in $000)</th>
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<tr>
<td>Changes in economic assumptions</td>
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<td>Claims recognised in accounts</td>
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<td>Actual claims and handling costs for year</td>
<td>3,174,766</td>
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But wait, there’s more

- Because of such uncertainties, ACC now advocating further funding on top of “full funding”
- If accepted, will add a further 16-18% to funding requirements: over $2 billion
- Will maintain funds in a band up to 40% above requirements to ensure it rarely dips below 100%
Where is the volatility?
Not in estimating next year’s levies and claims

Net levy revenue ($m)

Claims paid ($m)
Where is the volatility?
Huge variances in estimating long term liabilities and investment income

Increase in outstanding claims liability ($m)

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<thead>
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<th>Year</th>
<th>Actual</th>
<th>Budget</th>
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<td>2010</td>
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Net Investment income ($m)

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Actual | Budget
Where is the volatility?

Bottom line: a playground for politicians

Net surplus (deficit) after tax ($m)

-6,000 -5,000 -4,000 -3,000 -2,000 -1,000 0 1,000 2,000 3,000 4,000 5,000 6,000

-313 243 876 330 267 2,408 4,773 2,500

2001 2002 2003 2004 2005 2006 2007 2008 2009 2010

Actual  Budget
Happy medium

- Sound budgeting for annual levy income and claim costs etc with little variance – what is needed for PAYG
- 2002-2010 variances (actual-budget)
  - Net surplus/deficit ranges from -$4.6b to +$2.5b, mean -$600m
  - Revenue ranges from +$30m to +$430m, mean +$210m
  - Claims paid range from -$470m to +$120m, mean -$41m

So: create reserve, allowing for
  - Levy smoothing
  - Emergencies, unexpected patterns of claims or levy collection

- Otherwise, size of reserve depends on judgement of size of political opportunism
- Total of less than 12 months ($3b or less) looks plenty
Conclusion

- More analysis needed
- But rationale for full funding looks flimsy
- A reserve of under a year’s expected claims looks very viable
- Or make it part of the welfare system partly funded by an employer levy