The Treasury

Material Provided to the Public Inquiry into EQC Information Release

August 2021

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[31] 9(2)(f)(ii) - to maintain the current constitutional conventions protecting collective and individual ministerial responsibility

[33] 9(2)(f)(iv) - to maintain the current constitutional conventions protecting the confidentiality of advice tendered by ministers and officials

[34] 9(2)(g)(i) - to maintain the effective conduct of public affairs through the free and frank expression of opinions

[35] 9(2)(g)(ii) - to maintain the effective conduct of public affairs through protecting ministers, members of government organisations, officers and employees from improper pressure or harassment;

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Kaitohutohu Kaupapa Rawa

Treasury Report: Review of the EQC Act: Key Considerations in Designing Future Coverage of the EQC Scheme

Date:	9 December 2014	**Report No:**	T2014/2145
		File Number:	CM-1-3-15-1

Action Sought

	Action Sought	**Deadline**
Minister of Finance (Hon Bill English)	Discuss key design choices for the EQC scheme with each other and officials. A proposed agenda is attached.	None.
Minister Responsible for the Earthquake Commission (Hon Gerry Brownlee)		
Associate Minister of Finance (Hon Steven Joyce)		
Associate Minister of Finance (Hon Paula Bennett)		

Contact for Telephone Discussion (if required)

Name	**Position**	**Telephone**		**1st Contact**
Steve Cantwell	Principal Advisor	[39]	[23]	✓
James Beard	Manager, Financial Markets	[39]	[23]	

Actions for the Minister's Office Staff (if required)

Return the signed report to Treasury.

Enclosure: Yes – a proposed meeting agenda.

Treasury Report: Review of the EQC Act: Key Considerations in Designing Future Coverage of the EQC Scheme

Executive Summary

The EQC Review was discussed at Cabinet Strategy Committee (STR) on 21 July. This report responds to the direction in the resulting STR minute:

> *"[STR]* ***directed*** *Treasury, in consultation with other agencies as appropriate, to submit further advice in due course to the Minister of Finance, the Minister Responsible for the Earthquake Commission, and the Associate Ministers of Finance, which includes advice on the implications of different monetary caps on EQC cover and any consequential trade-offs in terms of the balance of risk between the Crown, private insurers and homeowners."*

We recommend that Ministers use this report to inform a discussion on future options for the level and structure of monetary caps for the EQC scheme. A proposed agenda for that meeting is attached to this report.

We envisage that the next public phase will be a discussion document seeking submissions on reform options and proposals.

This report sets the scene for consideration of the impact of different monetary caps by recapping the policy rationale and objectives for the EQC scheme. The key rationale is that, if homeowners are uninsured, governments feel compelled to provide assistance and compensation to them, creating large liabilities for governments, irrespective of the pre-disaster policy settings. New Zealand policy-making history has examples of this global phenomenon.

A scheme like EQC helps manage fiscal, market and recovery risks by reducing the costs and uncertainty of unplanned interventions, shaping community and industry expectations of assistance, and charging potential recipients for the assistance.

Current EQC cover (GST excl) for insured residential property damaged by earthquake, volcanic eruption, hydrothermal activity, landslip or tsunami is up to $20,000 for personal property (contents) and $100,000 for each dwelling.

EQC land cover is very complex, but primarily relates to land within 8m of an insured dwelling. Land cover also includes damage caused by a storm or flood. The maximum value of land cover is limited to the value of the minimum lot size allowed by the District Plan in the same location.

The Terms of Reference for this Review of the *Earthquake Commission Act 1993* state that the Government seeks to achieve the following objectives through the Review:

1. Minimise the potential for property-owners to experience socially-unacceptable **distress and loss** in the event of a natural disaster.

2. Minimise the **fiscal risk** to the Crown associated with private property damage in natural disasters.

3. Support an efficient approach to the **overall management of natural disaster risk and recovery**.
4. Support the contribution of a well-functioning insurance industry to **economic growth** opportunities in New Zealand.

These objectives sometimes compete. However, regarding monetary caps, the aim is to provide just enough EQC cover to result in high take-up rates, on a sustainable basis, of private catastrophe insurance by homeowners in high-risk areas.

A monetary cap that is too low is more damaging than a cap that is too high. A cap that is too high simply misallocates some risk away from insurers to EQC/ the Crown, but continues to price the risk. On the other hand a cap that is too low has real-world effects on community resilience and recovery after a disaster, and exposes the Crown to political-economy risks to provide further unplanned and unpriced support to homeowners.

The following sections describe the impact of different monetary caps on each of the above four objectives. Key questions are indicated in boxes.

Objective 1: Minimise the potential for property-owners to experience socially-unacceptable distress and loss in the event of a natural disaster.

The coverage of EQC plus private insurance needs to meet post-disaster community expectations of support. If not, there will likely be a political response to expand coverage or provide other assistance after a catastrophe.

A key question for Ministers is what level and type of losses are likely to prove socially unacceptable. Options that do not result in high levels of insurance for residential buildings, both nationally and in higher-risk areas, should be rejected as inadequately managing the political-economy risks the scheme is intended to address.

Do Ministers agree that preventing socially unacceptable distress and loss to owners of residential property is a binding political-economy constraint, and that any monetary caps should be set so that public and private insurance resources are sufficient to prevent socially unacceptable distress and loss?

The current $100,000[1] per dwelling monetary cap achieved this goal in Canterbury by supporting high levels of homeowner catastrophe insurance. However, we do not know if the current cap will continue to achieve this goal in light of insurer supply responses to the Canterbury earthquakes, including the shift to sum insured (or agreed-value) cover, the doubling of premiums since early 2011 (as measured by Stats NZ) and the increasingly granular pricing of cover. Therefore, a key decision is how to best balance future policy risks from a cap that is too low against the fiscal risks of the scheme.

Community pricing (i.e. applying the same premium rate nation-wide) is a key feature of the EQC scheme that helps minimise socially unacceptable loss and cannot be matched by private markets. This keeps cover affordable to homeowners in higher-risk areas, avoiding the political-economy risks that would flow from lower rates of insurance in those areas.

Objective 2: Minimise the fiscal risk to the Crown associated with private property damage in natural disasters.

As touched on above, we consider that fiscal risk is minimised when the EQC scheme provides and charges appropriately for sufficient EQC cover to support sustainably high take-up rates of private catastrophe insurance by homeowners both nationally, and in higher-risk areas such as Wellington.

[1] This report quotes EQC monetary caps and premiums exclusive of GST.

As the EQC cap increases it converts implicit Crown liabilities and privately insured risk into explicit Crown liabilities that can be charged for and actively managed.

Reforms of the EQC scheme have the potential to shed fiscal risks where the resulting risk transfer does not create socially unacceptable distress and loss. The 1993 reforms, which exited EQC from all non-residential disaster insurance, proved a success in that regard. Risk was transferred to owners and private insurers and has not returned to the Crown.

The fiscal impact of several options for changing the monetary cap on building cover, in conjunction with exiting contents cover and increasing claims excesses, are outlined later in this executive summary.

We first turn to other potential reform elements that focus on managing claims cost and risk. These are introducing a monetary cap on land cover, updating the claims excesses, and setting premiums to reflect the costs and risks of the scheme.

A Monetary Cap on Total Loss Land Cover

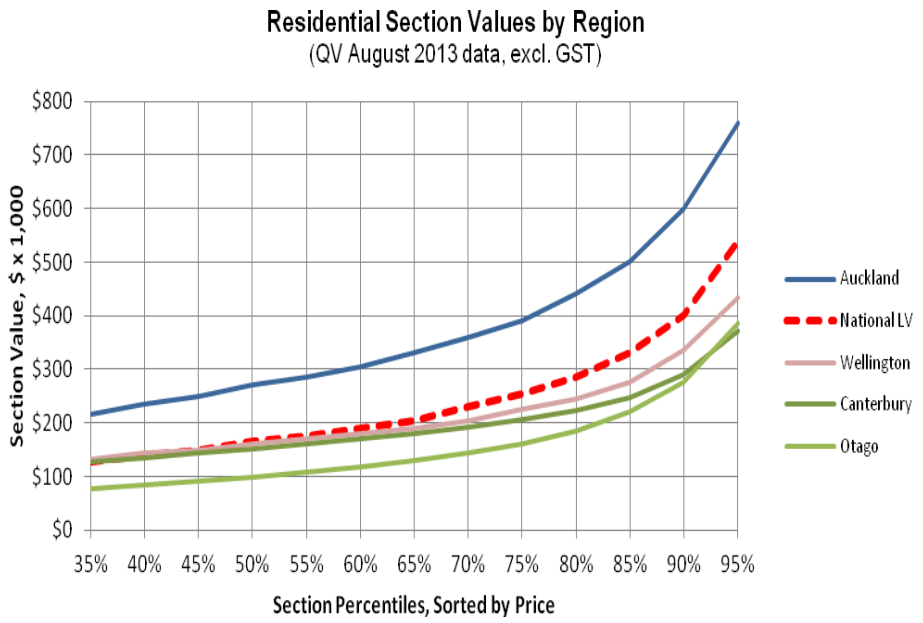
EQC land cover was introduced following the Abbotsford landslip. We see this as an example of losses by homeowners being considered socially unacceptable and triggering an ex-post government response. Therefore, regardless of whether land cover is reformed (which is discussed further under objective 4 below), land cover will need to be retained in some form to deal with total losses. Covering land provides homeowners whose sections cannot be rebuilt on with the resources to buy elsewhere.

At present land cover has no explicit monetary cap. However, the maximum payout under the current scheme is usually limited to the value of minimum land area allowable under the district plan for a residential section at that location. Therefore, in the event of total losses, EQC does not always pay the full market value of the affected section. Therefore, there may be potential to introduce a durable monetary cap to further reduce claims costs and risks.

As Auckland land prices are much higher than elsewhere in New Zealand, those prices drive the choice of the value for a monetary cap. As land cannot be insured privately, the land owner bears any loss on land that is not covered by EQC. The inability to insure land is a strong political-economy argument for the land cap being considerably higher than the building cap.

Introducing a monetary cap on land payments would slightly reduce the costs and risks of the scheme, but should only be contemplated if the resulting caps do not create socially unacceptable losses for owners of residential property (which would risk policy reversal after a disaster) and do not risk pushing up the building cap.

Distribution of New Zealand and Auckland Residential Section Values



Auckland Residential Section Values

Percentile	Value
60%	$305,000
75%	$390,000
80%	$440,000
90%	$600,000
95%	$760,000

Chart and table use August 2013 QVNZ data as at August 2013.

Do Ministers consider that introducing monetary caps on EQC insurance cover for the total loss of land (i.e. residential sites that cannot be reinstated or rebuilt on) is sustainable and consistent with the EQC scheme's objectives?

EQC Claims Excesses

Excesses on building claims are currently 1% of the value of the claim, or $200, whichever is greater. Standardising the claims excess at $500, $1,000 or $2,000 is estimated to reduce the costs of claims in a large Wellington event by, respectively, $17m, $99m or $259m. We suggest moving to a standard claims excess of $2,000.

Ensuring Premiums Reflect Risks of the Scheme

Preliminary analysis by EQC's broker, Aon Benfield, suggests that current EQC premiums appropriately compensate the Crown for the costs and risks of the scheme.

We propose that any new EQC Act includes premium-setting principles akin to the fiscal responsibility provisions of the Public Finance Act to help ensure that in future EQC premiums reflect the scheme's costs and risks to the Crown.

Objective 3: Support the contribution of a well-functioning insurance industry to economic growth opportunities in New Zealand.

Supply characteristics for private catastrophe insurance

For a given EQC scheme, the sharing of risk between insurers and homeowners depends on homeowners' risk appetite and insurance market conditions. Prior to the Canterbury earthquake sequence, a $100,000 EQC cap was enough to preserve the industry practice of all-perils (no exclusions) top-up cover. A central but currently unanswerable question is what level of cap will be required to keep disaster top-up cover ubiquitous in private insurance contracts in the face of changing market conditions, particularly more granular pricing.

Insurers expect that insurer pricing will become more granular over time, markedly increasing the price of top-up cover in higher-risk areas. In consultations in 2013, [26]

There would be offsetting reductions in lower-risk areas such as Northland.

Demand characteristics of residential catastrophe insurance

This report includes summaries of catastrophe insurance arrangements in Australia, Japan and the USA. It also summarises the conclusions of two papers by the Wharton Financial Institutions Centre that have examined the impact of price, and post-catastrophe government grants, on homeowners' demand for catastrophe insurance.

Our key conclusions are that demand for residential disaster insurance is relatively sensitive to price, and pricing, especially granular pricing, can be expensive. These factors can combine with moral hazard (expectations of government assistance) to cause low rates of insurance coverage in higher-risk areas. Therefore, we think that the EQC scheme contributes to New Zealand's high rates of residential catastrophe insurance.

The sensitivity to price, combined with the expected shift of private insurers to more granular pricing, suggests that EQC cover should continue to be community-rated (i.e. EQC cover have one national price) and that, given other changes in the insurance market, an increase in the EQC monetary cap may be necessary to keep private top-up cover affordable and attractive to the great majority of homeowners in high-risk areas.

Objective 4: Support an efficient approach to the overall management of natural disaster risk and recovery.

Scaling and shaping the EQC scheme to focus on the Government's core objectives, so the Government only takes on risk to the extent needed to support those objectives, helps ensure that risks are appropriately distributed among the Crown, householders and insurers.

Fixing Difficult Interactions between Building and Land Cover

Unexpected and complex interactions between land and building cover, and uncertainties regarding the nature of EQC land cover, are an ongoing source of uncertainty and friction among EQC, insurers and homeowners. This has caused considerable dispute and delay.

Officials' preferred solution is to align EQC building cover with normal insurance industry practice, so the trigger for land repair is building damage, i.e. building cover includes any associated land repairs. This would align with the Building Act, which states that a building includes its siteworks. This would remove the current difficult land-building interactions from the scheme. It would also reflect the reality that private insurers already see some EQC land payments as in substance part of the building cover and seek assignment of those payments to the private insurer. However, it is also a large structural change to the scheme, likely to trigger concerns from homeowners and insurers.

Analysis of this issue is complicated as EQC's current obligations regarding land cover are unclear and currently subject to legal action and review. However the overall impact of the proposed change would be a narrowing of the existing land cover. EQC would only repair or compensate land damage to the extent necessary to repair or reinstate the dwelling.[2]

If Ministers agree to align EQC building cover with industry practice regarding the inclusion of associated land repairs, the claims costs at any given monetary building cap would be

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2 Including, along the lines of the existing scheme, the access ways, retaining walls, bridges and culverts necessary to access, protect and support the dwelling.

reduced, as land claim costs that are currently additional to the building cap would become part of the building cap. We cannot model the resulting savings with any accuracy.

Although this change would reduce the scheme costs at any given building cap, if the scheme is changed so that the building cover includes associated land repair costs, we would suggest the monetary building cap be increased by a further $20,000-$50,000, compared to any building cap set reflecting the current separation of building and land cover. Historic EQC data suggests that 85% of land claims are less than $20,000. MBIE analysis from September 2013 estimates TC3 foundations cost $9,000-$55,000 more than a standard foundation. As with any increase of the monetary cap, these adjustments would increase the fiscal risks of the EQC scheme (and so increase EQC's premium revenues).

The simpler, more certain cover provided by aligning EQC building cover with industry practice has the potential to reduce homeowner distress if the community accepts the principle that insurers and EQC will only repair land to the extent that it is necessary and efficient to do so as part of repair or reinstatement of the dwelling.

The acceptability of this change is a largely political judgement, especially as this will likely be perceived by homeowners as a reduction of the existing EQC coverage of land damage (even if some aspects of the existing coverage for land damage are unintended, and some aspects would become more generous).

Do Ministers consider that a change to repair damaged land only to the extent it is necessary to do so as part of repairing or rebuilding a dwelling is sustainable and consistent with the EQC scheme's objectives?

Three Stylised Reform Packages

To help focus discussion we outline three stylised options. The options focus on changes in the size of the building cap, as that, along with decisions regarding amending cover for land repair are the key strategic design choices facing Ministers.

All three options are compatible with a wide range of decisions regarding EQC exiting contents cover, increasing the claims excess, incorporating land damage cover into the building cover to match the normal insurance industry approach regarding land repair, introducing a monetary cap on land cover, and making other technical changes to incorporate lessons from Canterbury.

Status quo - $100,000 building cap. No change to current expected annual loss or damage liability from a large Wellington event of $5.8 billion. The attraction of this option is its unchanged cost. The risk is that although the scheme achieved it goals in Canterbury, post-quake responses by insurers may expose homeowners in high-risk areas to premiums on top-up cover that are large enough to reduce take-up of residential building cover, increasing the Crown's implicit liabilities.

Modest change - $150,000 building cap. Expected annual loss increases by $9 million (10%). Liability from a large Wellington event increases by $660 million. Compared to the status quo, it reduces private insurers' exposure to risks insured by EQC by about 50 percent. Therefore average private premiums should decline and premium increases in areas of high-risk should also be about halved. Compared to the status quo, this option incurs higher fiscal risks now in return for less risk that market developments may compromise the other goals of the scheme in future.

Updated 1993 cover - $200,000 building cap. A $200,000 cap broadly matches the real value of the $100,000 cap when introduced. The expected annual loss increases by $13 million (14%). Liability from a large Wellington event increases by $1 billion. Compared to the status quo, it reduces private insurers' exposure to risks insured by EQC by over 70 percent. So on average private premiums should decline and any premium increases in areas of high-risk should also be modest, or even negative. Compared to the $150,000 cap, this option incurs somewhat higher fiscal risks now in return for greater assurance that future market developments will not compromise the other goals of the scheme in future.

Fiscal Impact of Potential Reform Options

The table below outlines potential packages of reforms. There is potential to reduce the fiscal risk of the EQC scheme by better focusing the scheme on avoiding potentially socially unacceptable losses and transferring risk from the EQC scheme where doing so doesn't risk future policy reversal. This table only includes the elements that can be modelled with some robustness, namely changes to the building cap, claims excess and contents cover. The changes to land cover discussed in this report would reduce fiscal costs and risk but cannot be modelled:

	Expected Annual Loss, $ million					**Expected Liability, Wellington Reference Event, $ million**				
	Building Cap					**Building Cap**				
	$100k	$150k	$200k	$250k	Uncapped	$100k	$150k	$200k	$250k	Uncapped
Expected Claims	$91	$100	$104	$107	$109	$5,819	$6,482	$6,824	$7,012	$7,234
Change From Status Quo										
Building Cap Changes	$0	$9	$13	$16	$19	$0	$663	$1,005	$1,193	$1,415
Exit contents cover	-12	-12	-12	-12	-12	-810	-810	-810	-810	-810
$2,000 excess	-7	-7	-7	-7	-7	-259	-259	-259	-259	-259
Impact of Combined Changes	**($19)**	**($10)**	**($6)**	**($3)**	**($0)**	**($1,069)**	**($406)**	**($64)**	**$124**	**$346**

What do Ministers consider would be the broad shape of a package that balances fiscal risk against the other objectives of the scheme? Potential elements include:

- increasing building caps
- exiting contents insurance
- standardising claims excess (at $2,000)
- aligning EQC building cover with normal insurer practice to include necessary site and foundation works, and limiting separate land cover to total loss land cover; and
- introducing monetary caps on land cover.

Impact of Changes on EQC and Private Premiums

Information from insurers suggests that that potential changes in building and contents premiums from EQC increasing building cover and exiting contents cover are broadly offsetting. One large insurer advised that, if EQC increased building cover to $200,000 and

exited contents, their building insurance premiums would reduce, and contents insurance premiums would increase, by about the same amount, around $100 per annum.

Next Steps

We recommend that Ministers use this report to inform a joint discussion of monetary caps and the design of building and land cover for the EQC scheme. A proposed agenda is attached.

Consultation

The EQC Review's interdepartmental governance group (the Treasury, EQC, the Reserve Bank, MBIE and independent expert Bevan Killick) have been consulted on this paper. DPMC have been informed of this paper.

Any insurance industry perspectives or analysis stem from our consultations with industry in early 2013.

Recommended Action

We recommend that you:

a **discuss** the attached draft report with each other and officials.

Agree/disagree.
Hon Bill English
Minister of Finance

Agree/disagree.
Hon Gerry Brownlee
Minister Responsible for the Earthquake Commission

Agree/disagree.
Hon Steven Joyce
Associate Minister of Finance

Agree/disagree.
Hon Paula Bennett
Associate Minister of Finance

b **note** the proposed attached agenda for that discussion includes four key questions:

- Does the political-economy rationale for the scheme mean that any monetary caps should be set so that public and private insurance resources are sufficient to prevent socially unacceptable distress and loss?
- Is introducing monetary caps on EQC insurance cover for the total loss of land (i.e. residential sites that cannot be reinstated or rebuilt on) sustainable and consistent with the EQC scheme's objectives?
- Is repairing damaged land only to the extent it is necessary to do so as part of repairing or rebuilding a dwelling sustainable and consistent with the EQC scheme's objectives?
- What could be the broad shape of a package that balances fiscal risk against the other objectives of the scheme? Potential elements include:
    - increasing building caps
    - exiting contents insurance
    - standardising claims excess (recommended at $2,000)

- aligning EQC building cover with normal insurer practice to include necessary site and foundation works, and limiting separate land cover to total loss land cover; and
- introducing monetary caps on land cover

James Beard
Manager, Financial Markets

Hon Bill English
Minister of Finance

Hon Gerry Brownlee
Minister Responsible for the Earthquake Commission

Hon Steven Joyce
Associate Minister of Finance

Hon Paula Bennett
Associate Minister of Finance

Treasury Report: Review of the EQC Act: Key Considerations in Designing Future Coverage of the EQC Scheme

Purpose of Report

1. This report provides information and analysis to assist Ministers in determining appropriate monetary caps for the EQC Scheme. It seeks Ministers' views on four strategic questions that shape the ambition of preferred options for reforming the EQC scheme.

Background

2. The EQC Review was discussed at Cabinet Strategy Committee on 21 July. This report responds to the direction in the resulting Cabinet Strategy Committee minute reads in part (STR Min (14)6/1 refers):

> *"[the Cabinet Strategy Committee]* ***directed*** *Treasury, in consultation with other agencies as appropriate, to submit further advice in due course to the Minister of Finance, the Minister Responsible for the Earthquake Commission, and the Associate Ministers of Finance, which includes advice on the implications of different monetary caps on EQC cover and any consequential trade-offs in terms of the balance of risk between the Crown, private insurers and homeowners."*

3. When considering the information in this report it is worth bearing in mind that the next phase, with Cabinet agreement, will be the release of a public discussion document on potential reform options. Therefore Cabinet does not need to reach final positions on all aspects of a preferred package at this stage. The discussion document could express a clear Government reform preference in some areas, and in other areas take a more open approach and seek public input to help inform final decisions.

Overview and Key Questions

4. This report is structured as follows:

   - Policy rationale for an EQC scheme.
   - The four objectives of the EQC scheme. This discussion includes analysis of the impact of the current and potential future EQC schemes on Crown risk and insurance coverage rates and pricing. This includes cross-country comparisons between New Zealand, Australia, Japan and the USA, and a brief overview of demand elasticities for residential disaster insurance.
   - Next steps and consultation.

5. This report poses four key questions for Ministers:

   - Do Ministers agree that preventing socially unacceptable distress and loss to owners of residential property is a binding political-economy constraint, and that any monetary caps should be set so that public and private insurance resources are sufficient to prevent socially unacceptable distress and loss?

- Do Ministers consider that introducing monetary caps on EQC insurance cover for the total loss of land (i.e. residential sites that cannot be reinstated or rebuilt on) is sustainable and consistent with the EQC scheme's objectives?

- Do Ministers consider that repairing damaged land only to the extent it is necessary to do so as part of repairing or rebuilding a dwelling is sustainable and consistent with the EQC scheme's objectives?

- What do Ministers consider could be the broad shape of a package that balances fiscal risk against the other objectives of the scheme?

Policy Rationale for an EQC Scheme

6. Before considering the impact of different monetary caps we recap the policy rationale and objectives for the EQC scheme. The key rationale is that if homeowners are uninsured governments feel compelled to provide assistance and compensation to them, creating large liabilities for governments, irrespective of the pre-disaster policy settings.

7. Whether this non-insurance is a policy problem depends crucially on whether uninsured homes create material implicit fiscal risks. We consider that they do. New Zealand evidence includes the extension of the original EQC scheme to include land following the 1979 Abbotsford landslip, the use of ad-hoc EQC-based mechanisms to compensate homeowners affected by the 2001 Waihi sinkhole (which was not and is not covered by the EQC scheme), the Canterbury residential red zones, the government support of AMI, and the ongoing pressure to increase the 50% residential red zone offer made to owners of uninsured land or buildings.

8. In addition, the policy motivation for the original Earthquake and War Damages scheme – inadequate insurance contributing to the slow rate of repair and recovery from the 1931 Napier and 1942 Wellington earthquakes – would likely reassert itself if a large future event occurred in an environment with lower rates of coverage for catastrophe insurance.

9. On the other hand, EQC's exit from non-residential catastrophe insurance as part of the 1993 reforms shed a lot of fiscal risk and has proven durable. Therefore, political judgements are required about what the geometry of the EQC scheme needs to be in order to achieve its political-economy goals.

10. The appropriate geometry of the EQC scheme is determined by policymakers' judgements about the size of scheme necessary to sustain high insurance coverage rates, and about what levels of distress and loss are socially unacceptable and would force ad-hoc government financial support.

Current EQC Scheme Coverage

11. Current EQC cover (GST excl) for insured residential property damaged by earthquake, volcanic eruption, hydrothermal activity, landslip or tsunami is up to $20,000 for personal property (contents) and $100,000 for each dwelling.

12. EQC land cover is very complex, but primarily relates to land within 8m of an insured dwelling. Land cover also includes damage caused by a storm or flood. The value of land cover is limited to the value of the minimum lot size allowed by the District Plan in the same location.

Objectives for the EQC Scheme

13. The Terms of Reference for this Review of the *Earthquake Commission Act 1993* state that the Government seeks to achieve the following objectives through the Review:

    - Minimise the potential for property-owners to experience socially-unacceptable distress and loss in the event of a natural disaster.
    - Minimise the fiscal risk to the Crown associated with private property damage in natural disasters.
    - Support an efficient approach to the overall management of natural disaster risk and recovery.
    - Support the contribution of a well-functioning insurance industry to economic growth opportunities in New Zealand.

14. These objectives sometimes compete. However, regarding monetary caps, the aim is a set of monetary parameters that provide just enough EQC cover to result in high take-up rates on a sustainable basis of private catastrophe insurance by homeowners in high-risk areas.

15. However the "optimal" monetary cap cannot be identified with any certainty as it depends on future context-dependent political-economy dynamics. Therefore, any cap that is chosen will likely be too low or too high. Whether to risk selecting a monetary cap that is lower or higher than is optimal depends on which risks are of most concern to Ministers. A cap that is too low compromises all four objectives as it risks higher rates of under-insurance of residential property and extra post-disaster ad-hoc government assistance to distressed homeowners. A monetary cap that is too high compromises only objectives 2 and 4 by unnecessarily transferring risk from private insurers to the Crown.

16. We consider a monetary cap that is too low is more damaging than a cap that is too high. A cap that is too high misallocates priced risk away from insurers to the Crown, whereas a cap that is too low has real-world effects on community resilience and recovery after a disaster, and exposes the Crown to political-economy risks to provide further unplanned and unpriced compensation to homeowners.

17. The above four objectives also guide EQC's provision of a range of other services for community and Government. These currently include:

    - research and education on natural disaster mechanisms, damage and damage reduction
    - risk transfer services (the reinsurance programme);
    - addressing coordination problems, such as the seismic drilling programme; and
    - post-disaster services, such as the Project Management Office, which has helped prioritise EQC repairs and limit post-disaster inflation in the building sector.

Objective 1: Minimise the potential for property-owners to experience socially-unacceptable distress and loss in the event of a natural disaster

18. The coverage of EQC plus private insurance needs to meet post-disaster community expectations of support. If not, there will likely be a political response to expand coverage or provide other assistance after a catastrophe; the scheme will fail its political economy rationale. Options that do not result in high levels of residential property insurance, both nationally and in higher-risk areas, should be rejected as inadequately managing the political-economy risks the scheme is intended to address.

19. The current $100,000 monetary cap achieved this goal in Canterbury by supporting high levels of catastrophe insurance for residential property. However, it is unclear if the current cap will continue to achieve this goal in light of insurer supply responses to the Canterbury earthquakes, including the shift to sum insured cover, the doubling of premiums (as measured by Stats NZ) and the increasingly granular pricing of cover.

20. A key feature of the EQC scheme that help minimise socially-unacceptable loss is its community pricing (i.e. the same premium rate applies nation-wide). This keeps cover affordable to homeowners in higher-risk areas, avoiding the political economy risks that would flow from lower rates of insurance in those areas.

Do Ministers agree that preventing socially unacceptable distress and loss to owners of residential property is a binding political-economy constraint, and that any monetary caps should be set so that public and private insurance resources are sufficient to prevent socially unacceptable distress and loss?

Objective 2: Minimise the fiscal risk to the Crown associated with private property damage in natural disasters.

21. This section is set out as follows: firstly it outlines, in a stylised way, how as the EQC scheme coverage expands, it shifts risks between explicit and implicit Crown risk, and homeowners and insurers. It then outlines the modelled Crown earthquake risk of the scheme at various building caps, and how the caps relate to current house values and building costs. It then discusses two options for reducing the Crown liability, including a monetary cap on land cover, and adjusting claims excesses. Lastly it outlines a proposal designed to ensure that EQC premiums appropriately compensate the Crown for the costs and risks the scheme imposes on the Crown, and the likely impact of reforms on EQC premium levels.

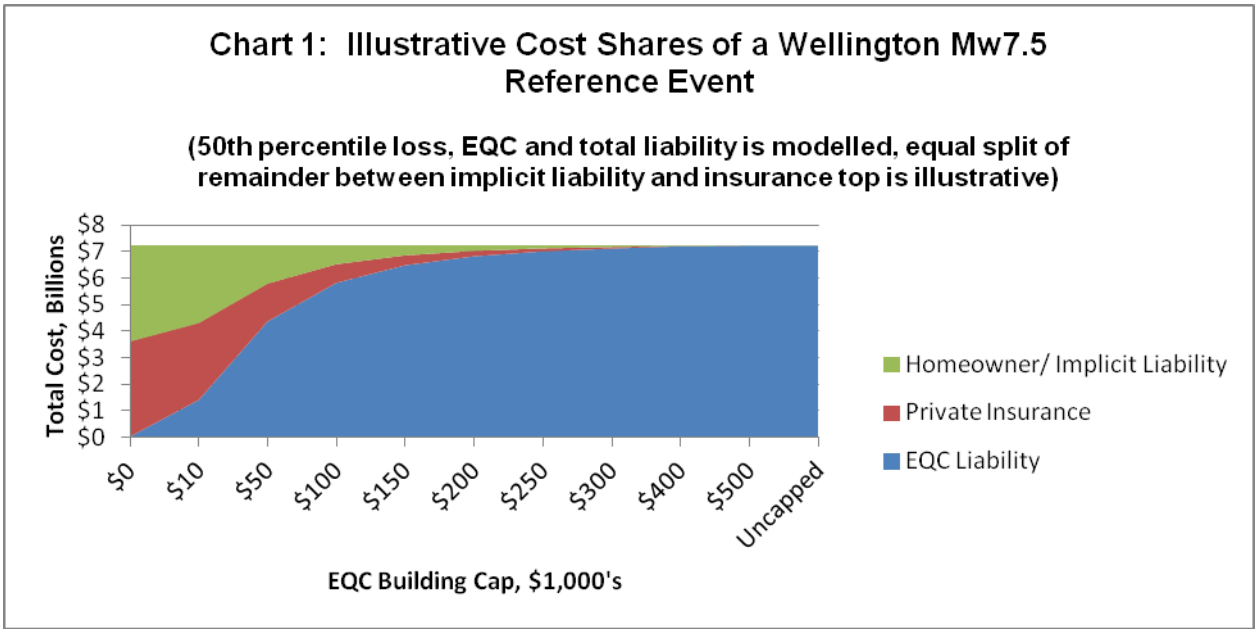
22. We consider that fiscal risk is minimised when the EQC scheme provides and charges appropriately for sufficient EQC cover to support sustainably high take-up rates of private residential catastrophe insurance both nationally, and in higher-risk areas such as Wellington.

23. The EQC scheme converts uncertain, implicit and unfunded Crown risks into more certain, explicit, funded ones. Therefore, a key judgement is how to balance the risks from an EQC scheme that is too large against the risks of one that is too small. This balancing of risk against risk ultimately requires a political judgment about what goals governments are likely to set, and what pressures governments can resist, following disasters. That judgment can be informed by analyses and data.

24. The analysis below shows the modelled claims costs to EQC of what is dubbed the "Wellington reference event". This is EQC's probable maximum loss event, the event that will inflict the largest modelled loss within a given timeframe. For EQC that is a large (Mw7.5) Wellington earthquake, which has an expected return period of about once every 1200 years. A 50th percentile loss is the average (median) expected loss. A 95th percentile loss means the modelled loss is less than this figure 95% of the time,

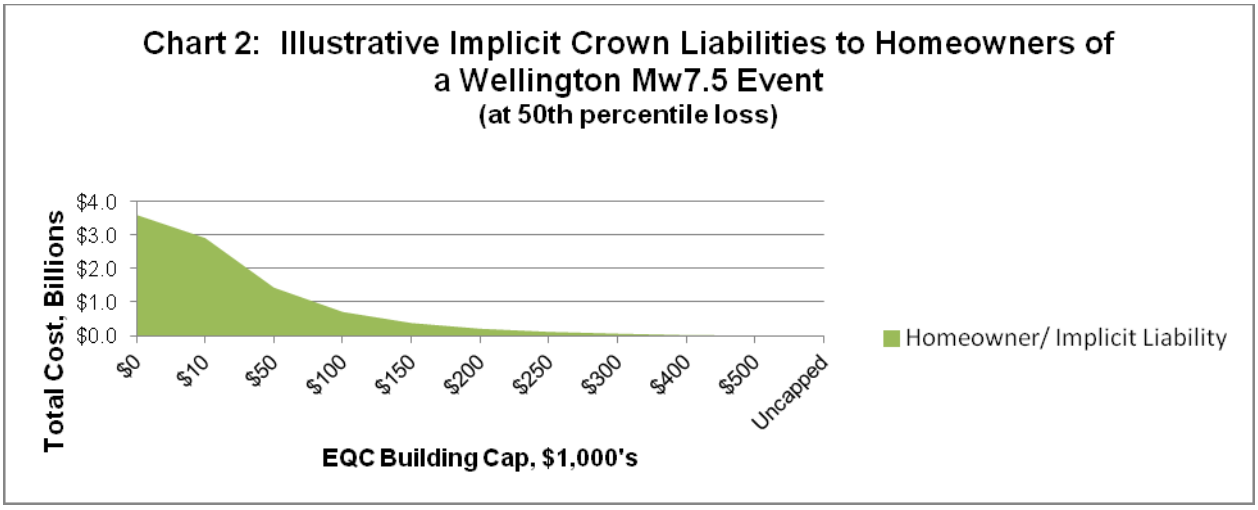
so for practical purposes it can be considered as worst-case. As table 1 overleaf shows, the 95th percentile losses are about twice as large as the 50th percentile (i.e. expected) losses.

25. Chart 1 shows how changes in the building cap might change risk allocation. The total costs and EQC's share of costs are modelled; the split between homeowners and insurers is illustrative. The costs are for a median (i.e. 50th percentile) expected loss from a Wellington reference event.



26. As the EQC scheme grows, it reduces the implicit liability, and displaces private insurance. The illustration above shows the implicit liability stemming only from uninsured homeowner demands for compensation. In reality any post-disaster failures (such as AMI) of private insurers can also create implicit liabilities. Both these sources of liability are reduced as the EQC scheme's building cap increases.

27. A key difference between the implicit liabilities and EQC liabilities is that the EQC liability can be priced so payers of EQC premiums compensate the Crown *ex-ante* for the liability, while the implicit liabilities entirely are funded by taxpayers. Chart 2 shows only the implicit risks component of Chart 1. An ad-hoc Crown post-disaster compensation package to homeowners could cost anywhere in the green area of Chart 2, depending on its generosity. As the EQC scheme takes on more risk, the residual implicit risks reduce.



28. However, unlike contingent implicit liabilities stemming from post-disaster political-economy dynamics, the EQC scheme does create more certain, and, at current levels of caps, likely larger legislated contingent risks for the Crown. This is true even if the EQC scheme is priced to compensate the Crown for the risks. Table 1 shows the modelled costs to EQC of the Wellington reference event. Features worth noting are that:

- the exposures are large, potentially warranting risk transfer through reinsurance or other means
- the 95th percentile cost estimates are about double the 50th percentile cost estimates (i.e the worst-case cost estimate of the costs of a Reference event is about twice as costly as the best guess estimate)
- the bulk of liability is incurred at low caps; and
- 50th percentile liabilities are bolded as they are the expected loss.

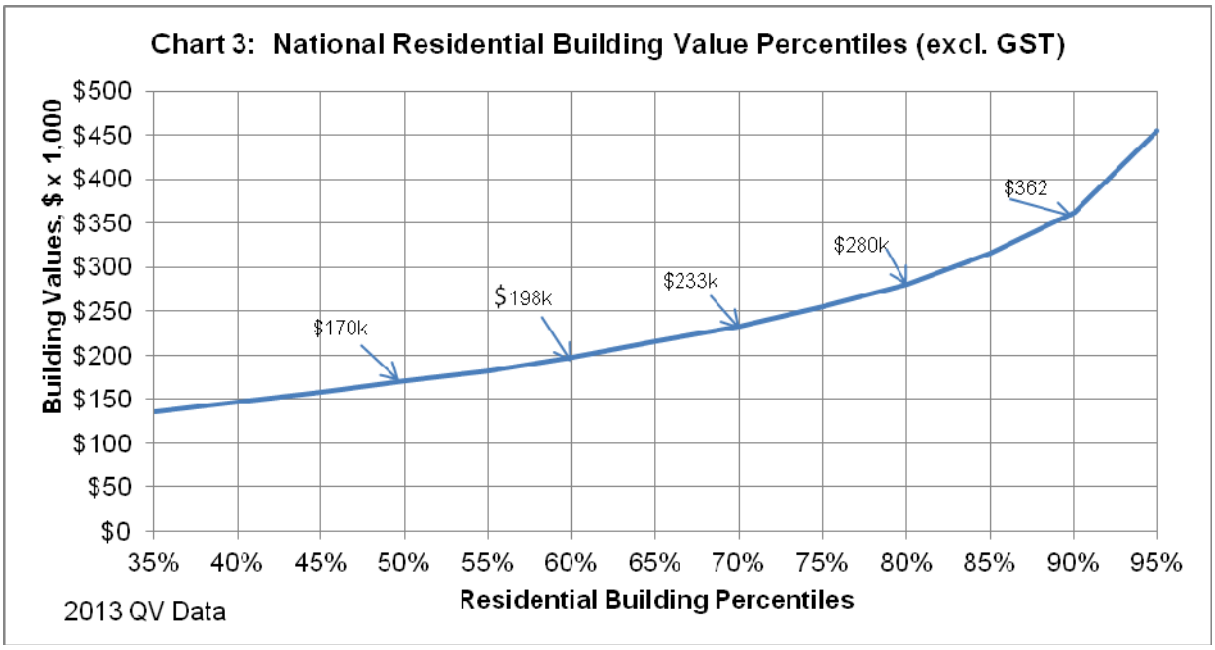
Table 1: EQC 50th and 95th Percentile Building Damage Liability for a Large Wellington Earthquake at Various Building Caps

Confidence Level	Reference event - Wellington Mw7.5- Liability, $ Million						
	$50k	$100k	$150k	$200k	$250k	$300k	Uncapped
50%	**$4,358**	**$5,819**	**$6,482**	**$6,824**	**$7,012**	**$7,116**	**$7,234**
95%	$7,309	$10,894	$12,737	$13,736	$14,291	$14,603	$14,998
Confidence Level	Capped Liability as Percentage of Uncapped Liability						
	$50k	$100k	$150k	$200k	$250k	$300k	Uncapped
50%	**60%**	**80%**	**90%**	**94%**	**97%**	**98%**	**100%**
95%	49%	73%	85%	92%	95%	97%	100%

Confidence Level	Change in Liability from Current $100,000 Cap, $ Million						
	$50k	$100k	$150k	$200k	$250k	$300k	Uncapped
50%	**($1,461)**	**$0**	**$663**	**$1,005**	**$1,193**	**$1,297**	**$1,415**
95%	($3,585)	$0	$1,843	$2,842	$3,397	$3,709	$4,104
Confidence Level	Change in Liability from Current $100,000 Cap, Percent						
	$50k	$100k	$150k	$200k	$250k	$300k	Uncapped
50%	**-25%**	**0%**	**11%**	**17%**	**21%**	**22%**	**24%**
95%	-33%	0%	17%	26%	31%	34%	38%

29. The current EQC insurance on the first $20,000 of contents is expected to generate $810 million of claims ($1.55 billion of claims at the 95th percentile) in a Wellington reference event. Exiting EQC contents cover would transfer these exposures to householders and private insurers.

30. One approach to considering an appropriate building cap is to relate the cap to the value of a certain fraction of the housing stock. This relates the cap to what is considered a socially acceptable standard of accommodation for EQC cover to fund. MBIE's published estimates show that a small (145m2) house using standard plans would have cost $180,000 excl. GST to build in July 2013. Chart 3 shows the value distribution of New Zealand's residential building stock. A $200,000 cap would exceed the value (not replacement cost) of about 60% of New Zealand's current housing stock. Not shown on the chart, the current $100,000 EQC cap exceeds the value of only about 15% of the current housing stock.



31. Reforms also have the potential to shed fiscal risks where the resulting risk transfer does not create socially unacceptable distress and loss. The 1993 reforms, which exited EQC from all non-residential disaster insurance, have proved a success in that regard. Risk was transferred to owners and private insurers and has not returned to the Crown.

Reduce Fiscal Risk by Putting a Monetary Cap on Land Cover?

32. EQC land cover needs to provide the resources to buy a new site elsewhere in the event that a site is a total loss (i.e. that is it is not possible or practicable to repair or rebuild on the current site). To be durable, the payout should reflect broader community expectations regarding the appropriate level of government support for owners who need to buy elsewhere.

33. At present, the value of EQC land cover is capped at the equivalent land value of the lesser of:

- the minimum lot size under the relevant district plan
- the area of land lost or damaged; and
- 4,000 square metres.

34. At present land cover has no explicit monetary cap. However, the maximum payout under the current scheme is usually determined by the value of the minimum land area allowable under the district plan for a residential section at that location. Therefore in the relatively rare event of the total loss of a landholding EQC is not always required to pay the full market value of the affected section.

35. Regardless of whether land cover is reformed (which is discussed further under objective 4 below), separate land cover will need to be retained to deal with total losses. This scenario led to the inclusion of land cover in the EQC scheme following the Abbotsford slip of 1979. Introducing a monetary cap on land payments would slightly reduce the costs and risks of the scheme, but should only be contemplated if the resulting caps do not create socially unacceptable losses for residential property owners (risking policy reversal after a disaster).

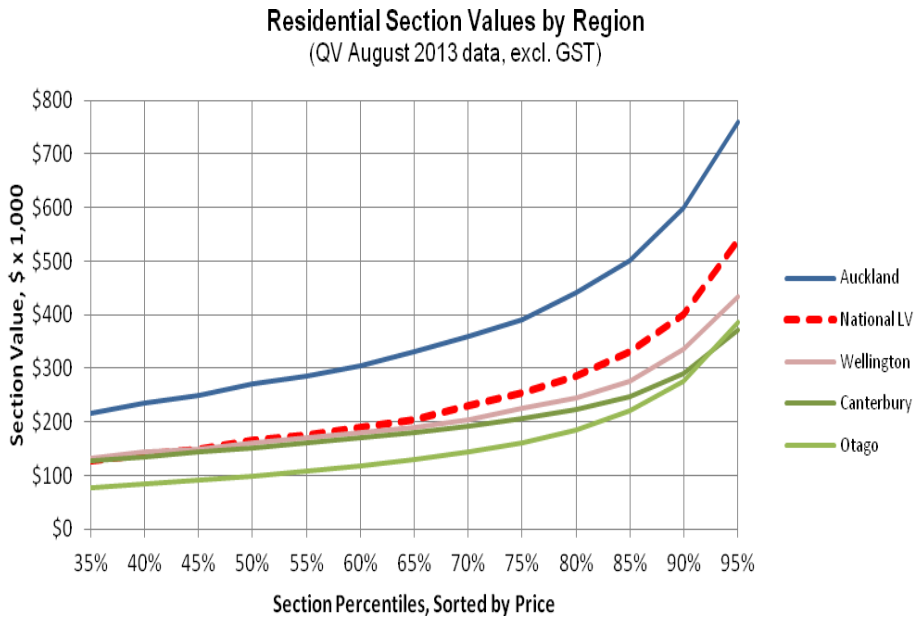
36. As land in Auckland is the most expensive in New Zealand, the driving consideration in setting such a cap is what fraction of Auckland residential property owners should be fully compensated in the event of a total loss of their land (as could occur due to a cliff collapse or volcanic eruption). As land cannot be insured privately, any losses not compensated by EQC will be borne by the home owner. Therefore, we would expect EQC to cover a higher share of the land losses than it would for buildings, for which private cover is available. Chart 4 shows residential section values in major regions and nationally. The 75th percentile value for a residential section in Auckland was $390,000 in august 2013.

37. In principle EQC cover is focussed on providing the resources to enable a homeowner to rebuild elsewhere, and not to fully insure expensive residential land. However, the political economy reality is that an insufficiently generous scheme will be prone to post-disaster expansion of coverage. This pushes risk onto the Crown and results in homeowners receiving benefits that are not reflected in EQC premiums. Therefore any monetary caps for land should be high enough to minimise this risk. Determining the appropriate level of such a cap requires a political-economy judgement.

38. A further consideration is that the optics of a monetary land cap that is higher than the building cap may create pressure during the public or legislative process to align the land and building caps, even though there is no policy reason to do that. As any land cap may well be $390,000 or more (i.e. above the 75th percentile for a residential section in Auckland) a building cap at this level would effectively nationalise residential disaster insurance for residential buildings, and would unnecessarily transfer risk to the Crown. If Ministers consider this a significant risk we would recommend not introducing an explicit monetary cap, and simply retain the current area-based rules (perhaps with other modifications).

39. Lastly, in consultation one bank has suggested that less generous EQC cover for residential land may increase mortgage interest rates (as the property the mortgage is secured against would be exposed to greater uninsurable risk). We consider any such effects would be minor given that EQC does not currently provide full insurance against catastrophe losses of residential land, upgrading the cover on retaining walls and access ways from indemnity to full replacement would reduce banks' risk, and banks currently provide mortgages on property not covered by EQC (e.g. vacant residential land, commercial land and buildings).

Chart 4: Distribution of New Zealand and Auckland Residential Section Values



Auckland Residential Property Values

Percentile	Value
60%	$305,000
75%	$390,000
80%	$440,000
90%	$600,000
95%	$760,000

Chart and table use August 2013 QVNZ data as at August 2013.

Do Ministers consider that introducing monetary caps on EQC insurance cover for the total loss of land (i.e. residential sites that cannot be reinstated or rebuilt on) is sustainable and consistent with the EQC scheme's objectives?

Updating and Simplifying Claims Excesses Paid by Home Owners

40. We suggest EQC follow normal insurer practice with a flat-rate excess. We suggest a $2000 excess for each claim. As now, building and land cover would be subject to separate excesses.

41. The Act currently sets the excesses for residential buildings and land as follows:

    Residential building: $200 multiplied by the number of dwellings in the building, or 1% of the amount payable under the EQC Act (i.e. $200-$1,000 per dwelling), whichever is the greater.

    Residential land: $500 multiplied by the number of dwellings in the residential building on the land, or 10% of the amount payable under the EQC Act, whichever is the greater, to a maximum of $5,000.

42. These provisions are needlessly complex, especially when EQC is dealing with a large number of claims in the context of a major disaster. In addition, the dollar value of the current excesses has not been updated for a long time. They predate the current 1993 EQC Act.

43. Higher average excesses transfer risk from EQC to homeowners, and ease claims management burdens on EQC by reducing the number of low-value claims. In determining the value of the excess, we have tried to strike a balance between administrative efficiency, social acceptability and disaster recovery concerns. A higher excess will reduce the number of low-value claims and allow EQC to focus on more serious damage. But if the excess is set too high, there is likely to be strong pressure to reduce the excess after a disaster.

Table 2: Impact of Different Caps on EQC Claims and Claims Costs

Excess on building claims	Reduction in number of EQC building claims from status quo	Reduction in average annual loss, $ million	Reduction in Reference event expected liability, $ million
$500	2.4%	1.0	17
$1,000	5%	3.2	99
$2,000	8.9%	7.2	259
$5,000	17.2%	17.0	703

44. The Canterbury earthquakes have generated over 400,000 building claims for EQC, so these percentage reductions potentially represent tens of thousands of low-value claims that would no longer need to be processed by EQC.

Pricing and Collection of EQC Premiums

45. We propose to retain the current arrangements in which the EQC premium is levied on fire insurance policies for residential buildings. We also propose to retain the current legislative flexibility to charge either a flat-rate or risk-rated premium (though a flat-rate pricing structure best matches the goals of the scheme)

46. However, we suggest that disciplines be placed on premium-setting to help ensure that the Crown is appropriately compensated for the risks of the scheme. History suggests there is little incentive to adjust EQC pricing outside of a crisis: the increase in the EQC premium in 2012 was the first change in the premium rate (as a percentage of cover) since the scheme was established in 1945. We propose to require the premium rate to be set so that it fully compensates the Crown for the scheme's costs and risks. We envisage this would work in a similar manner to ACC levy-setting: EQC would recommend a levy to Ministers based on technical analysis, the Treasury would provide second-opinion advice on the recommendation, and Ministers would decide the premium rates. We envisage Ministers could depart from pricing the scheme on its costs and risks subject to transparency disciplines akin to the fiscal responsibility provisions of the Public Finance Act.

47. Preliminary analysis by EQC's broker, Aon Benfield, suggests that, with reasonable assumptions (including a 15% risk margin, reflecting current industry norms), the current EQC premium adequately compensates for the costs and risks imposed by the current scheme. A simple revenue and cost analysis supports this view. The modelled average annual earthquake losses of the current scheme (excluding any risk margin) are about $104 million, while EQC earned premium in 2012/13 was $273 million, excluding GST; over 2.5 times the expected earthquake losses. EQC currently does not model the expected liabilities of other the other perils covered by the scheme[3], but EQC claims data since 1997 shows non-seismic claims have averaged about $20 million per annum (and ranged from $3m to $57m in any one year).

48. This analysis reflects underlying catastrophe risk and does not make any allowance for premiums to accommodate potential future risk-management and funding choices, such buying a certain level of reinsurance or rebuilding the NDF faster than would occur under business as usual settings. However, in principle, the proposed pricing approach is flexible enough to accommodate a wide range of risk transfer and funding decisions.

49. Increasing the building cap would increase the EQC liability and hence increase EQC premium revenues. As noted above increasing the building cap to say $200,000 would

[3] The other perils are natural landslip, volcanic eruption, hydrothermal activity, tsunami, and storm and flood. EQC covers only residential land (not buildings or contents) against storm and flood.

increase the average annual loss by about 15 percent, implying a similar percentage increase in EQC average premiums.

50. Although the maximum annual premium per residence would increase, the premium per dollar of cover would decline, as the cover has doubled and the premium has not. Preliminary modelling of a $200,000 cap suggests that the premium rate would decline from the current 15 cents per $100 of cover, to about 9 cents per $100 of cover. If this occurred, the maximum premium payable would be $180+GST for $200,000 of EQC cover. Owners of homes insured for less than $167,000 would see decreases in their total EQC premium paid. About half the housing stock is valued at less than $170,000 (see Chart 3).

51. In addition, with the proposed approach to premium-setting, any other changes that impact on expected costs, such as increasing the claims excess, would flow through to premium levels.

Objective 3: Support an efficient approach to the overall management of natural disaster risk and recovery

Impact of the Existing EQC Scheme on insurance coverage rates

52. The EQC scheme has existed since the 1940s. Therefore the impact of the scheme on insurance coverage cannot be directly observed. We draw on two sources, cross-country comparisons and academic research, to gain insights into the likely impacts of the EQC scheme on household insurance coverage rates.

Cross-Country Comparison

53. ***New Zealand –*** about 90% of residences are insured, increasing to about 95% if government-owned housing is excluded from the base. Industry data on average premiums is unavailable, although data provided to AMI customers (following the IAG sale) indicates AMI's average premium was $934 in 2012, including GST, EQC and Fire Service Levies. The EQC levy is $150+GST. Residential insurance policies are all-perils policies, without exclusions for catastrophe risks such as earthquake and flood.

54. From February 2011 to June 2014 prices for dwelling insurance as measured by Statistics NZ have more than doubled. There has also been a big structural change with the shift from full-replacement to sum-insured policies, which has shifted construction and repair cost risks from insurers to the insured.

55. In consultations, insurers have indicated that the presence of the initial $100,000 of EQC cover reduces, but does not eliminate, incentives on private insurers to move to more granular pricing of their EQC top-up cover. In consultations in 2013, [26,36]

There would be offsetting reductions in lower-risk areas such as Northland.

56. Cross-country analysis suggests that large increases in the price of the top-up cover would reduce the take-up of that cover. The larger the uninsured gap between the EQC cover and the replacement cost of damaged dwellings, the larger the residual implicit Crown risk.

57. ***Australia –*** About 96% of residences are insured[4]. Non-insurance against flood risk is an emerging policy concern. About 93% of Australian homes are assessed as facing zero flood risk. The remaining 7% face negligible to severe flood risks with annual modelled flood premiums ranging from $77-$6,777[5] (with resulting annual residential premiums from all risks ranging from $1,000 to $9,000[6]). About 10% of home insurance policies exclude flood cover[7].

58. We were unable to find data on the relationship between flood premiums and take up of flood cover, but think it reasonable to assume that flood premiums are a big determinant of property owners' decisions to not buy flood cover. Pricing is becoming more granular as insurers respond to large weather-related losses and improvements in risk modelling.

59. There is no direct government participation in the sector, but deteriorating affordability and availability of residential catastrophe insurance in high risk areas due to increased pricing granularity of flood risk is of ongoing policy interest, with at least three public government reviews since 2011[8]. One review recommended the establishment of a government-owned reinsurer of residential flood risk. This was rejected by the Australian Government due to fiscal concerns (and, as we see it, the moral hazard/ political economy issue is less of a concern in Australia than in NZ as 93% of Australian homes are assessed as facing zero flood risk).

60. ***Japan –*** Earthquake cover is only available as an optional attachment to fire cover. About 50% of fire insurance policies include earthquake cover. As a result, a small but growing share of households, currently about 27%, insure against earthquake damage. Earthquake insurance covers 30-50% of losses provided by the underlying fire policy up to a maximum cover of Y50 million (about $570,000)[9]. Earthquake premiums are Y6,500-Y32,600 (about $75-$370) per annum per Y10 million (about $115,000) of cover[10]. With typical dwelling prices in the Y20-40 million ($230,000-$460,000) range[11], this suggests premiums typically ranging from $150-$1500 per annum. The earthquake policies are fully reinsured with the Japan Earthquake Reinsurance Corporation (JER), which is a statutory corporation owned by Japanese general insurers. JER in turn reinsures with the Japanese government and private markets.

61. A striking feature is the low take-up of earthquake cover, despite Japan's seismicity and the pricing (which is risk-based and broadly comparable to EQC's premium of $150+GST for $100,000 of cover). Two reasons put forward for this low take-up are that homeowners perceive the cover as expensive, and the Japanese practice of frequent proactive demolition and replacement of residential buildings (the average life of a Japanese wooden residential building is 20 years). If homeowners routinely plan and save for rebuilds they are better placed financially to deal with unexpected earthquake losses.

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4 The Non-Insured: Who, Why and Trends, Insurance Council of Australia, May 2007.
5 Natural Disaster Insurance Review, final report, Table 3, page 35, September 2011.
6 Table 4, Insurance Council of Australia Response to the Natural Disaster Insurance Review, July 2011.
7 Insurance Council of Australia aggregated flood policy data http://www.insurancecouncil.com.au/industry-statistics-data/flood-cover
8 The Natural Disaster Insurance Review of 2011, Addressing the high cost of home and strata title insurance in North Queensland of 2014, and the current Australian Productivity Commission Review into Natural Disaster Funding, to report by the end of 2014.
9 World Bank, Knowledge note 6-2, Earthquake Risk Insurance, circa 2013. http://wbi.worldbank.org/wbi/document/earthquake-risk-insurance
10 Ministry of Finance Japan, https://www.mof.go.jp/english/financial_system/earthquake_insurance/outline_of_earthquake_insurance.html#04
11 http://www.globalpropertyguide.com/Asia/japan/Price-History

62. ***USA*** **–** In response to large flood losses in the 1950's and 60's, residential insurance policies offered by private insurers in the US now typically exclude catastrophic risks, including earthquake and flood. This has led to initiatives such as the California Earthquake Authority (CEA, established 1996) and the Federal National Flood Insurance Program (NFIP, established 1968). The Government Accountability Office (GAO) noted in a 2014 report to Congress[12] that *"The challenging mix of financial risk, political and regulatory issues, policy cost, and consumer demand has thus far prevented private sector insurers in the U.S. from offering flood insurance to homeowners, let alone more comprehensive or all-perils policies."*

63. In ***California***, earthquake cover is provided by private insurers and the publicly-managed-private-funded California Earthquake Authority (CEA). In 2013 average CEA premiums were $US676 (about $NZ800) and average cover was $US380,000 ($NZ460,000)[13]. As premiums are risk-rated, CEA premiums can be several thousand dollars per policy. CEA policies have a 10% or 15% deductible, so the owner of, say, a $380,000 house carries the first $38,000 or $57,000 of damage themselves. Coverage rates are low and declining, with about 10% of homeowners currently taking up earthquake insurance. The low take-up appears to be the result of the high deductible, a perception that premiums are expensive, and the expectation of federal government assistance after a disaster.

Key Conclusions from Cross-Country Comparisons

64. Our key conclusions from the cross-country analysis are that demand for residential disaster insurance is relatively sensitive to price, and that pricing, especially granular pricing, can be expensive. These factors can combine to cause high rates of non-coverage of in higher-risk areas. Therefore it is very likely that the EQC scheme contributes to New Zealand's high rates of residential catastrophe insurance.

65. The cross-country analysis suggests an intervention should focus on where the political-economy risk lies (i.e. focussed on residential, not commercial and industrial property) and scaled to be large enough to encourage high rates of insurance penetration. Given the current design of the EQC scheme, the key question then is selecting an appropriate monetary cap. A related question is deciding the relationship between building and land cover, as this decision affects the complexity, coverage and risk of the scheme.

Academic work on Characteristics of the Demand for Residential Insurance

66. The limited academic work in this area suggests that catastrophe insurance is price-sensitive, and that post-disaster government assistance to the uninsured can drive further reductions in coverage.

67. There are theoretical reasons for believing that the demand for catastrophe insurance is more elastic than non-catastrophe insurance, including expectations of assistance in the event of a disaster, and cognitive biases such as adaptive or backward-looking expectations (relying on the past to predict the future). A 2006 paper by the Wharton Financial Institutions Centre, *The Demand for Homeowners Insurance with Bundled Catastrophe Coverage,* estimates a price elasticity of non-catastrophe insurance of about 0.4, versus a price elasticity of about 2.9 for catastrophe insurance (in this case hurricanes).

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12 United States Government Accountability Office, report to Congress, January 2014: "Homeowners Insurance - Multiple Challenges Make Expanding Private Coverage Difficult"

13 http://www.insurance.ca.gov/0400-news/0200-studies-reports/0300-earthquake-study/upload/EQEXP2013.pdf

68. Another Wharton paper, "*Does Federal Disaster Assistance Crowd out Private Demand for Insurance?"* concludes that each dollar of Federal post-disaster homeowner grant assistance reduces insurance coverage by about $6. Subsidised Federal disaster recovery loans appeared to have no effect on insurance coverage.

69. These results are consistent with the cross-country evidence that where homeowners can unbundle their insurance the take-up rates for catastrophe insurance are lower, sometimes much lower, than for non-catastrophe insurance.

70. The sensitivity to price, combined with the expected shift of private insurers to more granular pricing, suggests that EQC cover should continue to be community-rated (i.e. EQC cover have one national price), and that an increase in the EQC monetary cap may be necessary to keep private top-up cover affordable and attractive to the great majority of homeowners in high-risk areas.

Future Developments in Private Insurer Pricing

71. While the total risk and the EQC's share of that risk can be modelled with some certainty, the impact of differing levels of EQC cover on the take-up of private top-up cover is poorly understood.

72. With the current EQC cover and insurers continuing to cross-subsidise prices for risky areas, the take-up of private cover is very high, although there are media reports of owners of earthquake-prone Wellington apartments abandoning top-up cover in the face of increases in annual premiums for private top-up cover of $10,000 or more per apartment.

73. A consistent message in Treasury consultations with insurers is that insurers have the systems to price premiums at a much more granular level than they currently do. Individual insurers appear reluctant to risk brand damage by moving first, but also want to be able to respond quickly if others move to more granular pricing, as if they do not follow they will be selected against (i.e. lose low-risk customers and become over-weight in higher risk customers). Insurers characterise this transition as being inevitable, with uncertain timing.

74. This risk complicates the analysis, as an EQC scheme that achieves its objectives under historical and current market conditions will probably no longer do so once insurers move to more granular pricing. Premiums in high-risk areas such as parts of the Hutt Valley are likely to increase by several thousand dollars. The international evidence suggests that this would see many policy holders move to exclude earthquake damage from their policies, relying only on the EQC cover, creating contingent implicit fiscal and policy risks for the Crown.

75. A further consideration is that the current standard residential insurance offerings of insurers in New Zealand are all-risks policies, with no exclusions from earthquake damage. This is desirable from a political-economy perspective and relatively unusual internationally. It is likely due to insurers not fully risk-rating individual premiums, and EQC taking on the bulk of the seismic risk. The government has no direct control over insurers' pricing and policy design decisions, but the higher the EQC cap, the greater the likelihood that insurers will retain all-risks policies as their standard offering.

76. Therefore one decision Ministers face is to what extent the decision to increase caps should reflect current market conditions or should anticipate the shift to more granular pricing. The higher the cap, the less disruptive will be the move by private insurers to more granular pricing. Either way, it will be necessary to monitor the situation and consider increasing the caps further if increases in private premiums associated with more granular pricing create pockets of uninsured judged large enough to create significant political economy risks following a disaster.

Impact of Changes on EQC and Private Premiums

77. Information from insurers suggests that potential changes in building and contents premiums from EQC increasing building cover and exiting contents cover are broadly offsetting. One large insurer advised that if EQC increased building cover to $200,000 and exited contents, their building insurance premiums would reduce and contents insurance premiums would increase by about the same amount, around $100 per annum.

    Building Cover - Preliminary analysis by EQC's brokers suggests that the current EQC premium for residential property ($150+GST) is at about the right level to compensate the Crown for the cost and risk the EQC scheme imposes. Increasing the current cap from $100,000+GST to $200,000+GST would increase the EQC premium by about $30. One large insurer indicated in early 2013 that this change would reduce their premiums by about $100.

    Contents Cover - EQC currently covers the first $20,000 of contents damage from perils covered by the EQC scheme. If EQC exited the provision of contents cover, the $30 EQC premium on contents would no longer be collected. One large insurer indicated contents premiums would rise by about $100, resulting in a net increase in contents premiums of about $70.

78. There is tension between the results of the insurer consultation (that imply that EQC premiums are below market rates) and the advice of EQC's broker that the current EQC premium appears broadly in line with market pricing of that risk. We intend to follow up on that in future consultations with insurers.

Objective 4: Support the contribution of a well-functioning insurance industry to economic growth opportunities in New Zealand.

79. Higher monetary caps reduce the claims interactions between EQC and insurers.

80. Scaling and shaping the EQC scheme to focus on the Government's core objectives, so the government only takes on risk to the extent needed to support those objectives, helps ensure that risks are appropriately assigned between the Crown, householders and insurers.

81. Aligning EQC building cover with industry practice would remove the complex interaction between land and building cover. The current design of the scheme undermines this objective. Unexpected and complex interactions between land and building cover, and uncertainties regarding the nature of EQC land cover, are an ongoing source of uncertainty and friction between EQC, insurers and homeowners. This has caused considerable dispute and delay.

82. Officials' preferred solution is to better align EQC building cover with the definition of building in the *Building Act*[14] and normal insurance industry practice. EQC building cover would include land repair (siteworks) to the extent these works are a necessary and efficient part of the building repair. This would remove from the scheme a source of considerable uncertainty and friction. However it would also mean that residential property owners would only be compensated for land damage to the extent necessary to repair or reinstate the dwelling. This element would be a narrowing of the existing land cover. However, we have also proposed to responsible Ministers that the cover for retaining walls, access ways, bridges and culverts be changed from indemnity cover to

[14] The *Building Act 2004* defines a building to include "sitework", where "sitework" means work on a building site, including earthworks, preparatory to, or associated with, the construction, alteration, demolition, or removal of a building.

replacement value cover. That would align with the rest of the scheme and enhance cover for those often-expensive items. Table 3 summarises the advantages and disadvantages of aligning EQC land cover with insurance industry practice.

83. The simpler, more certain cover provided by aligning EQC building cover with industry practice has the potential to reduce homeowner distress if the community accepts the principle that insurers and EQC only repair land to the extent that it is necessary and efficient to do so as part of repair or reinstatement of the dwelling (including access to the dwelling). The acceptability of this is a political judgement.

Do Ministers consider that repairing damaged land only to the extent it is necessary to do so as part of repairing or rebuilding a dwelling is sustainable and consistent with the EQC scheme's objectives?

Table 3: Better Aligning EQC Building and Land cover with Industry Practice

Option	Advantages	Disadvantages
1) Align EQC Building Cover with Industry practice (officials' preferred option) **Adopt usual industry practice and remove separate cover for land repair. Land repair is included in building cover and focuses on what is necessary to reinstate or replace the damaged building. Where it is not possible or practicable to repair or rebuild on the same site, there will be a total loss payment to support relocation elsewhere.**	• Most strongly links cover to the proposed purposes of the scheme, keeping the focus on restoring housing rather than insuring land as a separate asset. • Eliminates disputes regarding the boundary between building and land cover. • Impact on Crown risk depends on whether building cap under this option is higher than building cap when separate land cover is retained.	• Pushes more risk onto home owners. • EQC would not cover land damage that does not damage the home. • With private insurers moving to sum insured policies the costs of bad surprises regarding site works costs will be borne by homeowners. • Insurers divided on its merits, but qualified support from IAG.
2) Improved status quo (with dollar cap) **Improved status quo: Land within 8 metres of dwelling is still covered separately.** **With this option we also need to determine if EQC should continue to cover financial loss attributed to increased vulnerability to future damage.**	• Improves some of the interactions between land and building cover. • Minimises change so insights from experiences to date are retained. • Impact on Crown risk depends whether building cap under this option is lower than building cap if separate cover for land damage is abolished.	• Scope of scheme is broader than it needs to be to meet housing objectives of the scheme.

Pulling it together - Three Stylised Reform Packages

To help focus discussion we outline three stylised options. The options focus on changes in the size of the building cap, as that, along with decisions regarding amending cover for land repair are the key strategic design choices facing Ministers.

All three options are compatible with a wide range of decisions regarding EQC exiting contents cover, increasing the claims excess, incorporating land damage cover into the building cover to match the normal insurance industry approach regarding land repair, introducing a monetary cap on land cover, and making other technical changes to incorporate lessons from Canterbury.

Status quo - $100,000 building cap. No change to current expected annual loss on buildings of $91 million and building damage liability from a large Wellington event of $5.8 billion. The attraction of this option is its unchanged cost. The risk is that although the scheme achieved it goals in Canterbury, post-quake responses by insurers may result in premiums on top-up cover that in high-risk areas are high enough to reduce homeowner take-up of that cover, increasing the Crown's implicit liabilities.

Modest change - $150,000 building cap. Expected annual loss increases by $9 million (10%). Liability from a large Wellington event increases by $660 million. Compared to the status quo, it reduces private insurers exposure to risks insured by EQC by about 50 percent. On average private premiums should decline and premium increases in areas of high-risk should also be about halved. Compared to the status quo, this option incurs higher fiscal risks now in return for less risk that market developments may compromise the other goals of the scheme in future.

Updated 1993 cover - $200,000 building cap. A $200,000 cap broadly matches the real value of the $100,000 cap when introduced. The expected annual loss increases by $13 million (14%). Liability from a large Wellington event increases by $1 billion. Compared to the status quo, it reduces private insurers exposure to risks insured by EQC by over 70 percent, so on average private premiums should decline and any premium increases in areas of high-risk should also be modest, or even negative. Compared to the modest change, this option incurs somewhat higher fiscal risks now in return for greater assurance that future market developments will not compromise the other goals of the scheme.

All three options are compatible with EQC exiting contents cover, increasing the claims excess, aligning EQC's building cover to match the normal industry approach regarding land repair, introducing a monetary cap on land cover, and making other technical changes to incorporate lessons from Canterbury.

Table 4 outlines potential packages of reforms. There is potential to reduce the fiscal risk of the EQC scheme by better focusing the scheme on avoiding potentially socially unacceptable losses and transferring risk from the EQC scheme where doing so doesn't create undue risk of future policy reversals.

Table 4: Fiscal Impacts of Potential Reform Options

	Expected Annual Loss, $ million					Expected Liability, Wellington Reference Event, $ million				
	Building Cap					Building Cap				
	$100k	$150k	$200k	$250k	Uncapped	$100k	$150k	$200k	$250k	Uncapped
Expected Claims	$91	$100	$104	$107	$109	$5,819	$6,482	$6,824	$7,012	$7,234
Change From Status Quo										
Building Cap Changes	$0	$9	$13	$16	$19	$0	$663	$1,005	$1,193	$1,415
Exit contents	-12	-12	-12	-12	-12	-810	-810	-810	-810	-810
$2,000 excess	-7	-7	-7	-7	-7	-259	-259	-259	-259	-259
Impact of Combined Changes	**($19)**	**($10)**	**($6)**	**($3)**	**($0)**	**($1,069)**	**($406)**	**($64)**	**$124**	**$346**

What do Ministers consider could be the broad shape of a package that balances fiscal risk against the other objectives of the scheme? Potential elements include:

- increasing building caps
- exiting contents insurance
- standardising claims excess (at $2,000)
- aligning EQC building cover with normal insurer practice to include necessary site and foundation works, and limiting separate land cover to total loss land cover; and
- introducing monetary caps on land cover.

Next Steps

84. We recommend that Ministers use this report to inform a joint discussion of monetary caps and the design of building and land cover for the EQC scheme. A proposed agenda is attached.

85. Responsible Ministers will draw on any conclusions or agreements from that discussion when developing a paper for Cabinet proposing a reform package for inclusion in a public discussion document.

Consultation

86. The EQC Review's interdepartmental governance group (the Treasury, EQC, the Reserve Bank, MBIE and independent expert Bevan Killick) have been consulted on this paper. DPMC have been informed of this paper.

87. Any insurance industry perspectives or analysis stem from our early 2013 consultations with industry. To ensure our understanding of industry views is current, we intend to retest insurance industry views prior to the discussion document being finalised.

Review of EQC Act: Discussion on Impact of EQC Monetary Caps and Scheme Design on Sharing of Risk between Crown, Homeowners and Insurers

PROPOSED AGENDA

1. Policy rationale and objectives

- Confirm the policy rationale of the EQC scheme is to help manage political-economy risks.
- Note the four objectives for the EQC Review
  - Minimise socially-unacceptable **distress and loss** from natural disasters.
  - Minimise the **fiscal risk** from private property damage in natural disasters.
  - Support efficient **management of natural disaster risk and recovery**.
  - Support a well-functioning insurance industry to **economic growth**.
- Note EQC provides a range of other useful services to the Crown e.g. research, education, risk transfer, post-disaster repair services.

2. Key questions:

- Do Ministers agree that preventing socially unacceptable distress and loss to owners of residential property is a binding political-economy constraint; that any monetary caps should be set so that public and private insurance resources are sufficient to prevent socially unacceptable distress and loss?
- Do Ministers consider that introducing monetary caps on EQC insurance cover for the total loss of land (i.e. residential sites that cannot be reinstated or rebuilt on) is sustainable and consistent with the EQC scheme's objectives?
- Do Ministers consider that repairing damaged land only to the extent it is necessary to do so as part of repairing or rebuilding a dwelling is sustainable and consistent with the EQC scheme's objectives?
- What do Ministers consider could be the broad shape of a package that balances fiscal risk against the other objectives of the scheme? Potential elements include:
  - increasing building caps
  - exiting contents insurance
  - standardising claims excess (at $2,000)
  - aligning EQC building cover with normal insurer practice to include necessary site and foundation works, and limiting separate land cover to total loss land cover; and
  - introducing monetary caps on land cover.