

# ***Covered bonds and bank failure management in New Zealand***

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The global financial crisis of 2008 has highlighted the question of where the costs fall when banks (or other financial institutions) fail

- Previous New Zealand experience of bank and financial institution failure:
  - PSIS
  - DFC
  - Bank of New Zealand (but it didn't actually fail.....)
  - Finance companies since 2006, particularly
  - South Canterbury Finance
- So the issue is a real one: failures do happen

# Banks are financial intermediaries

- They provide a place where savers can deposit their funds on a short-term basis
- They make loans on a longer-term basis and collect interest which is the bank's income
- To cover the resulting maturity mismatch between short-term funding and long-term investments, they hold reserves of liquid assets sufficient to ensure that those depositors wishing to withdraw funds are able to do so
- If all the depositors try to get their funds out at the same time (a “bank run”) then the bank “fails” in the sense that it is unable to meet all current claims
- Failure can also be caused by other events which upset the balance sheet, e.g. the collapse of the US housing market boom in 2008 which made many of the home mortgages held by banks into worthless “toxic assets”

# A simple old-style textbook bank balance sheet

Assets	Liabilities
Liquid reserve assets Loans	Deposits Shareholders' equity (capital)
Total assets	Total liabilities

- Depositors had first call on the assets, followed by the shareholders who carried the loss if assets were insufficient to cover liabilities
- If liquid assets were depleted then other assets would be liquidated to pay, in full or in part, the claims of creditors
- If depositors could not all be paid out on demand, then they suffered losses.

## The New Zealand banking sector relies for its funding on wholesale borrowing as well as retail depositors

- Retail depositors are mostly local savers
- Wholesale funding is secured by selling bonds to investors both locally and overseas
- Both sources of funding are channelled into local-economy loans
- Until 2010 both sources of funding were unsecured creditors, in the sense that they held general claims over the bank assets but their funds were at risk if the bank failed
- In the event of failure, wholesale funders and retail depositors would be paid out ahead of shareholders - but wholesale bondholders are senior to retail depositors

# Structure of a 'typical' NZ bank balance sheet

Assets			Liabilities		
		\$			\$
Liquid assets 16%	Cash	2	Retail deposits	50	} Funding 82%
	Marketable securities	14	Wholesale funding	32	
Loans 73%	Housing loans	43	Derivatives	7	} Rats & mice 11%
	Other loans	30	Other liabilities	2	
Rats & mice 11%	Deferred tax	1	Subordinated debt	2	} Capital 7%
	Derivatives	7			
	Goodwill & other intangibles	2			
	Fixed & other assets	1	Shareholders' equity	7	
<b>Total</b>		<b>100</b>	<b>Total</b>		<b>100</b>

[L]ook at the capital structure of banks. Imagine a cake of many layers, each representing the bank's liabilities. At the very bottom is a thin sliver of costly equity. This is the money that a bank's shareholders have put into the business. Next comes a layer of "hybrid" or "junior" debt that is supposed to pad out the equity layer but is made of somewhat cheaper ingredients. Above that come various layers of debt that make up the main body of the cake. The thickest slices are bank bonds, or "senior unsecured debt", and bank deposits. **The icing on top is its "secured" debt, such as covered bonds** or other loans and derivatives, where creditors can grab hold of assets if their loan is not repaid.

"Burning Sensation", *The Economist* 21 July 2012

## Sorting the creditor queue

- Legislation currently before the New Zealand Parliament proposes to give greater certainty to purchasers of a new class of financial instruments, “covered bonds”, backed by priority claims on prime bank assets
- The big attraction of covered bonds is that their holders are placed at the front of the creditor queue, with the status of secured creditors
- This gives those investors “greater certainty”, in Bill English’s words\*
- Ordinary unsecured retail depositors are to be pushed back down the queue - ahead of the bank shareholders, but behind a lot of others
- That’s not good news for retail depositors, unless Government steps in again with a guarantee on retail deposits – which would shift any losses from depositors to taxpayers

\* Bill English, “Greater certainty for covered bond investors”, media release 10 May 2010 <http://www.national.org.nz/Article.aspx?articleId=38459>



# Covered bonds

- Covered bonds confer a first claim on a sequestered bundle of high-rated mortgages or other assets in the event of bank failure.
- The best assets in the bank's portfolio are removed from the reach of a liquidator and placed in a separate cover pool devoted solely to backing covered bonds issued and sold to investors, most of whom will be overseas in the New Zealand case.
- The value of the cover pool is to be maintained by topping-up as necessary with other assets from the bank's balance sheet

# Covered bonds already issued

ANZ-National - \$3,831 million of mortgages pledged as security for covered bond issuance

ASB - \$500 m + CHF200 m (=NZD254m)

BNZ - \$5,387 million of housing loans in trust to support issuance of \$4,408 million

Westpac - \$3.76 billion held as collateral for covered bond issuance. Amounts issued include EUR1 billion and CHF325 million

Total is over \$13.5 billion – nearly 4% of these banks' assets already sequestered. The RBNZ proposes a 10% limit.

# Current position

	Assets \$ billion	Covered bonds pools \$ billion	% of assets
ANZ-National	115.3	3.8	3.3
ASB	64.4	~0.8	1.2
BNZ	71.7	5.4	7.5
Westpac	67.9	3.8	5.5
Total	319.3	13.7	4.3

## Some implications

- The whole point of increasing the security of a favoured group of investors is to strengthen their position when and if a financial collapse occurs
- The assets placed into cover pools are not to be available at all to meet claims from unsecured creditors, unless and until the covered bond holders have been fully reimbursed
- Once the banks' top-ranking assets are sequestered into cover pools, the quality of the assets available to provide security for other creditors, including depositors, is reduced
- Risk is shifted, not reduced.

# Covered bonds are only the tip of a rapidly-growing iceberg

- The assets ringfenced off into cover pools are not the only ones that would be unavailable to meet depositor claims in the event of bank failure
- To assess the potential losses to New Zealand interests – depositors and taxpayers – from bank failure, one has to ask what good quality assets on the bank books could turn out to be missing when the liquidator goes looking
- This exercise is an essential part of evaluating the “open bank resolution” process that the RBNZ is now developing

It's good to see the Reserve Bank of  
New Zealand (RBNZ) developing a  
policy for dealing with bank failures

But is it a good policy?

# Open bank resolution (OBR)

- Intended by the Reserve Bank as a way of dealing with bank failure
- Associated with principle that bank depositors will already have identified problems with bank safety and soundness through review of bank disclosure statements
- But very few depositors in practice have the time or the expertise to unravel detailed bank accounting disclosures

# How OBR handles bank failure

- Some portion of every customer's balance (in a bank where the Reserve Bank deems action to be necessary) will be removed from the account and converted to bank equity
- Remaining balance in the customer's account will then be guaranteed by government



# Old nursery rhyme:

Old Mother Hubbard<sup>1</sup>  
went to the cupboard  
to get her poor dog<sup>2</sup> a bone  
But when she got there  
the cupboard was bare  
and so the poor dog got none

1 RBNZ/liquidator

2 Retail depositor

# What good quality assets might not be available to depositors?

- Loans that have been sold to parent banks
- Registered mortgage backed securities
- Covered bonds
- Repos
- Assets pledged as collateral for derivatives and other exposures
- Derivative and intangible assets

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# Loans sold to branch of parent bank

Example with ANZ-National – at 31 March 2012

- Net loans of subsidiary - \$84.467 billion
- Net loans of branch - \$93.817 billion
- Net (housing) loans transferred - \$9.303 billion
- No evidence of risk-shifting in this case - provisions for retail mortgages in subsidiary are \$238 million, compared to \$269 million in branch

# Registered mortgage backed securities (RMBS)

- Loans sold to a third party, who finances purchase by sale of securities
- Borrower generally retains relationship with bank
- But may achieve independence/separation from bank balance sheet

# Repurchase agreements (repos)

- High quality liquid assets may be sold to counterparties with an agreement for repurchase, as a means of obtaining short-term funding
- Like a secured overdraft
- Repos so far mainly undertaken with RBNZ
- Likely to become more prevalent if/when OBR system comes into effect
- The assets are in the counter-party's hands, not the bank's, when business opens for the day. If the bank has failed overnight, it has no means to get the assets back and the counter-party can dispose of them

# Assets pledged as collateral

- Often important for derivative contracts
- Not currently very important in New Zealand for domestic operations (reflecting the relative uniformity in credit ratings), but significant in USA in run-up to GFC

# Derivative assets and intangibles

- Intangibles not especially large (except for ANZ-National) and required to be covered by equity
- Derivative assets (and liabilities) will be larger when interest rates are more volatile.  
Numbers largely off-set each other on balance sheet



# Derivative assets and liabilities

<b>\$M (31 March 2012)</b>	<b>Derivative assets</b>	<b>Derivative liabilities</b>	<b>Net</b>
ANZ-National	9959	10318	(359)
ASB	1709	1858	(149)
BNZ	4772	4873	(101)
Kiwibank	100	140	(40)
Westpac	11	167	(156)

# So if a bank gets into difficulty, what would the depositors be left with?

- Would the marketable securities still be available to repay depositors?
- What would have happened to the mortgage loans?
- What other assets might have changed in value?
- What would the balance sheet then look like?

# The balance sheet when the OBR is applied

Assets	\$	Liabilities	\$
Cash – gone to repo	2	Retail deposits	50
Marketable securities – gone to repo	14	Wholesale funding – all repaid from repos and covered bonds	32
Housing loans – gone to repo	16	Derivatives (?)	7
Housing loans	27		
Other loans	30	Other liabilities	2
Deferred tax – now worthless	1		
Derivatives (?)	7	Subordinated debt	2
Goodwill & other intangibles – now worthless	2	Shareholders equity, adjusted for write-downs	4
Fixed & other assets	1	Shareholders' equity	
<b>Total</b>	<b>100</b>	<b>Total</b>	<b>100</b>

- \$39 billion of wholesale funding and derivatives is paid off
- Then retail depositors have \$50 billion of claims against \$57 billion of non-liquid assets which are unlikely to realise that value of liquidated in distressed circumstances
- Some proportion of deposits will be guaranteed by taxpayers (many of whom are depositors....)

- The banks and RBNZ argue that the overall risk of systemic failure is lower if bank funding is more secure at the margin
- But there is a respectable argument that the opposite could be true. “A second risk is that senior bank creditors will respond to the potential for losses **in a way that makes the system less stable**. They may make sure their loans are secured—which in turn increases the losses inflicted on the remaining unsecured creditors and thus the price they will demand.”

(“Burning sensation”, *The Economist* 21 July 2012, <http://www.economist.com/node/21559344> )
- And New Zealand is a very small player in a big world, from where financial crisis is most likely to come. The detailed structure of our bank balance sheets won't change the world – but it will certainly change the identity of the losers in a crisis
- So what policy ideas arise from this financial reconnaissance expedition?

## First, recall some lessons from the Global Financial Crisis

- The financial sector has become far larger and riskier than the textbook story of how banks operate
- Large size, effective lobbying for deregulation, and complex financial engineering, have made banks and bankers harder to regulate effectively
- The costs when financial institutions get into difficulties frequently fall on parties other than the owners and management of those institutions
- A central policy problem is how to design regulatory frameworks to avoid the situation where gains from financial-sector risk-taking are privately appropriated while costs are socialised

# Government underwriting of private banks creates moral hazard

- If governments step in to “bail-out” illiquid and/or insolvent banks, the effect is to shift the costs of bank failure onto taxpayers
- Bank owners and managers are then able to appropriate their gains from bank lending during normal times without having to worry (as much as they would otherwise do) about making provision to cover depositors’ claims in times of crisis
- The incentive is for banks to over-indulge in high-return high-risk activities that threaten the stability of the financial sector
- Open Bank Resolution includes a deposit-guarantee provision that exposes the system to moral hazard. Much hinges on how this is neutralised

# **“Taxpayers should not pay for bank failures. So creditors must”**

“THE only way to deal with moral hazard is to take out bank bondholders and have them shot,” says a hedge-fund manager. By “shot” he is not recommending actual executions, but saying that investors should suffer losses when the banks whose bonds they hold need rescuing. To date during the financial crisis this has been a rarity. Bondholders have been the Scarlet Pimpernels of finance—investors who prove elusive every time a bank’s losses are divided up.

...

A world in which bank bondholders expect to get shot is one in which taxpayers are safer.”

“Burning Sensation”, *The Economist* 21 July 2012



The banks also argue that covered bonds are already accepted in other countries and NZ should not be left behind

- But actually, banning covered bonds was common until very recently
  - Australia lifted its ban only in December 2010 under heavy bank lobbying (but there is depositor priority)
  - South Africa bans them because its central bank has a mandate to protect the interests of depositors (<http://www.interest.co.nz/bonds/60382/mps-reviewing-covered-bonds-law-concerned-about-depositor-risk-and-question-why-south-af>)
  - Neither the US nor Canada yet has legislation to legitimise covered bonds, because the FDIC has remained strongly opposed (see next slide)

# U.S./Canadian Covered Bonds: No Legislation Until 2013 (Esaki)

“Efforts to introduce U.S. covered bond legislation will not resume until January 2013 at the earliest, according to Asset Backed Alert. The FDIC opposed earlier attempts and will remain a roadblock next year. Canada’s government will approve covered bond enabling legislation by the end of the year, according to the article, but limit issuance to 4% of a bank’s assets.”

- Standard & Poors *Structured Finance Research Update* 20 August 2012

# Seven specific suggestions for the NZ Parliament

- Ban covered bonds; or if this is too much,
  - Require stringent regulation and oversight, with transparent reporting requirements
  - Specifically require banks to publicly disclose all assets they nominally hold which are not available to cover depositors, including covered bonds, repos, related party transactions, to enable depositors to accurately judge the risk level of their deposits
  - Require covered bonds to be denominated in NZD – let hedging be someone else’s problem
  - Prohibit covered bonds being issued to, or acquired by, any associated party of the issuing bank
  - Limit covered bond issuance to well below 10% of bank assets; maybe 4% as in some other jurisdictions
  - Impose a rule that if one of the Australian bank’s credit ratings were to fall to BBB+ or below, their assets in New Zealand should be strictly ring-fenced under the supervision of RBNZ-appointed accountants, to prevent any looting of a New Zealand subsidiary.
  - Ensure contingent liabilities are properly reported in the Crown accounts

(Homework: read “Looting: The economic underworld of bankruptcy for profit” by G. Akerlof and P. Romer, *Brookings Papers on Economic Activity* 1993 (2), pp. 1-60.)

# Should we have legislated depositor protection?

“With the onset of a systemic banking crisis, [Icelandic deposit insurance] proved totally irrelevant. The Icelandic parliament, through emergency legislation on the eve of the meltdown in 2008, granted priority to depositors over other claims on the estates of fallen banks. This proved crucial to the resolution of the crisis, and as the winding-up of the fallen banks continues, the legislation will ensure all depositors<sup>1</sup> claims have been or stand to be covered. And they will be covered in full, not only up to the minimum stipulated by EU directives.”

Steingrimur Sigfusson Icelandic lessons in coming back from the brink  
Financial Times August 20 2012 <http://www.ft.com/intl/cms/s/0/0dabbb86-eabe-11e1-984b-00144feab49a.html#ixzz24E>

# The problem restated

- We don't have a clear, consistent, coherent and sensible system for dealing with failing banks
- This cost the taxpayer big dollars with South Canterbury Finance
- The obvious conclusion is: don't let it happen with the banks