Tailrisk Economics Pinocchio awards

Reserve Bank of New Zealand's proposed bank capital increases

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Contact

Ian Harrison
Ph. 022-175-3669
e-mail harrisonian52@gmail.com

Pinocchio Assessment methodology

The assessments are adapted from the Washington Post's Fact checking methodology.

- **One Pinocchio:** "Some shading of the facts. Selective telling of the truth. Some omissions and exaggerations, but no outright falsehoods.
- **Two Pinocchios:** "Significant omissions and/or exaggerations. Some factual error may be involved but not necessarily. A public office holder can create a false, misleading impression by playing with words and using technical language that means little to ordinary people."
- **Three Pinocchios:** "Significant factual error and/or obvious contradictions."
- **Four Pinocchios:** "Whoppers."

We also make an overall assessment of each document or paper by awarding 'Trump' assessments based on the number of Pinocchios awarded.

Moderately Trumpesque	5 - 9 Pinocchios	
Trumpian	10 - 16 Pinocchios	
Full blown Trump	17 plus Pinocchios	

Reserve Bank of New Zealand's proposed bank capital increases

Our overall assessments are:

Governor's speech:	Full blown Trump	
Non-technical summary:	Full blown Trump	
Interest.co.nz interview	Trumpian	
Deputy Governor's speech	Full blown trump	

Governor's Speech

Notes from an address delivered to Business NZ CEO Forum that argues for higher capital requirements 30 November 2018.

The Reserve Bank needs to ensure there is sufficient capital in the banking "system" to match the public's "risk tolerance". This is because it is the New Zealand public - both current and future citizens - who would bear the social brunt of a banking mess.

We know one thing for sure, the public's risk tolerance will be less than bank owners' risk tolerance

The Bank doesn't know for sure that the public's risk tolerance will be less than the bank owners'. New Zealand bank owner have substantial franchises to protect, which makes them more cautious than they would otherwise be. The Bank has made no effort to assess the public's risk tolerance.

Two Pinocchios

How do we know this? Surely the more capital a bank has the safer it is and the more it can lend.

This does not necessarily follow. The more capital required, the less a bank can lend in the first instance. If a bank is capital constrained, it must reduce its lending if capital is increased.

Two Pinocchios

And, the most a bank owner can lose is their capital. The wider public loses a lot more (see Figure 2).

Banks can lose more than just their capital. They lose their franchise, which in New Zealand, is particularly valuable as evidenced by their high ongoing profitability. The franchise value is probably worth as much, or more, than the regulatory capital.

Figure 2 (not reproduced here) depicts the fiscal cost of bank failure as a percent of banking system assets. The better measure of the burden on the public is the **net cost** to GDP. With a few exceptions, this cost in advanced countries that have experienced banking crises has been moderate – a few percent of GDP. The Bank has made no assessment of the relative cost to governments and bank shareholders. In the GFC, the fall in banks' market capitalisations dwarfed governments' capital contributions.

Two Pinocchios

Hence, we need to impose capital standards on banks that matches the public's risk tolerance. We have been reassessing the capital level in the banking sector that minimises the cost to society of a bank failure, while ensuring the banking system remains profitable.

The policy doesn't minimise the cost to society of a bank failure – it just reduces it.

The Reserve Bank's policy doesn't ensure the system remains profitable – that is market determined. The Bank has made no effort to assess the public's risk tolerance.

One Pinocchio

The stylised diagram in Figure 3 highlights where we have got to. Our assessment is that we can improve the soundness of the New Zealand banking system with additional capital with no trade-off to efficiency.

This makes it appear that more capital is costless - when the cost could be about $1.5 billion a year.

Four Pinocchios

In making this assessment, our recent work makes the explicit assumption that New Zealand is not prepared to tolerate a system-wide banking crisis more than once every 200 years. We have calibrated our 'sweet spot' thinking about economic 'output' and financial stability benefits.

The Bank settled on a 1:200 target, when the Governor decided, on a whim, to go for a 1:200 target. The original target was 1:100, which would not have required a capital increase. There was no consideration of output and financial stability benefits in the target decision.

Four Pinocchios

Banks also hold more capital than their regulatory minimums, to achieve a credit rating to do business. The ratings agencies are fallible however, given they operate with as much 'art' as 'science'.

Bank failures also happen more often and can be more devastating than bank owners – and credit ratings agencies – tend to remember. The costs are spread across the public and through time.

The inference here is that rating agencies are poor at recording bank failure events. They are not. Taking a long historical perspective, bank failures in New Zealand have been very rare.

Three Pinocchios

Total Pinocchios: 18 

The Bank's non-technical summary

Part of the consultation document on the capital increases.

Bank Capital: What is it?

Banks get their money from two places – their owners (often referred to as 'shareholders') and people they borrow from, including depositors (often referred to as 'creditors'). The money that banks get from their owners is referred to as 'capital'.

This omits capital contributions from non-owners. The failure to say anything about other forms of capital is a material omission in this context.

One Pinocchio

The Capital Review

It is important that the Reserve Bank's banking regulations are up to date. There is also increasing evidence that the costs of bank failures – both economic and social (well-being) costs – are higher than previously understood. This is why we're reviewing the capital rules for banks.

The latest evidence is that the cost of bank failures is lower than earlier studies.

Two Pinocchios

Banks currently get the vast majority of their money by borrowing it (usually over 90 percent), with the rest coming from owners (usually less than 10 percent). The Reserve Bank is proposing to change this balance by requiring banks to use more of their own money. This proposal is consistent with steps taken by other banking regulators after the Global Financial Crisis.

New Zealand has already increased capital along with other regulators following the financial crisis and New Zealand's tier one capital, measured on a comparable basis, is higher than international norms. Other regulators, including Australia are now increasing capital using relatively inexpensive tier two capital to reduce fiscal risk. Australian approach imposes much lower costs on borrowers and depositors alike.)

Three Pinocchios

The Reserve Bank is proposing this change to reduce the chances of banks failing in New Zealand. If banks in New Zealand fail, some of us might lose money and some of us might lose jobs. However, there would also be indirect costs on all of society that *may be harder to see that would negatively impact the well-being of all New Zealanders. In the end, we would all bear the cost of bank failures, in one way or another.*

The increase in capital will impact on the fiscal cost of a failure, but a bank failure, in itself, is not the biggest cause of job and money losses. Bank failures are usually the result of a significant economic shock. More capital can mitigate this only to a limited degree, as New Zealand banks will still be dependent on the health of the economy and the financial strength of their parents.

Three Pinocchios

This is why we want to make the chances of this happening very small – so small that a banking crisis in New Zealand shouldn't happen more than once every two hundred years.

The best evidence is that New Zealand banks already meet the 1:200 test

Two Pinocchios

Extent of changes
We expect only a minor impact on borrowing rates for customers.

The impact on borrowers will be significant. Using the RBNZ's own estimates a typical first home borrower will pay another $1000 per year initially which will add somewhere in the order of $20,000 more over the life of their loan. That is not a minor impact.

Two Pinocchios

Possible Impacts
If banks increase their capital, they will be more resilient to economic shocks and downturns, which will strengthen New Zealand's banking system and economy.

The impact on resilience will be minor. New Zealand main banks will still be dependent on the health of their parents.

One Pinocchio

What’s the downside?

Because the level of a bank’s capital can have an impact on the interest rate it charges on its loans, it is possible that higher capital requirements could make it more expensive for New Zealanders to borrow money from a bank.

While we certainly take this into account, we think this impact should be minimal.

The Reserve Bank did not take the increased cost of borrowing into account at all. Their ‘soundness’ test does not take account of borrowing costs. The efficiency assessment rather loosely references some foreign cost benefit analyses, which do not take the direct impact of increased borrowing cost on the borrower into account. A cost of $1.5 billion a year is not minimal.

Four Pinocchios

Total Pinocchios: 18 

Interview with the Governor Interest.co February 18, 2019

Banks' financial rewards have been greater than the risks they've taken, and the Reserve Bank's proposals for banks to hold more capital would bring the reward down to something that better justifies their risk, Reserve Bank Governor Adrian Orr says.

What the Governor appears to be saying is that banks are really low risk, but they are earning excessive returns relative to that risk. So, if their capital is increased, their returns will come down. This presumes that banks don’t increase their margins (more on that below). If banks are earning excess returns, this is market efficiency not a soundness issue. It makes no sense to reduce competition by increasing the capital ratios of capital constrained New Zealand banks.

One Pinocchio

"*For every risk there should be a reward and when you look at the banking system globally that reward has been greater than the risk taken. And that happens because banks can take the returns, they don't have to wear all of the losses because the losses are socialised through bank bailouts and failure management and all of the things that we're still struggling to recover from in the GFC [Global Financial Crisis] globally,"*

Banks are limited liability companies like most businesses, so they don't wear all of the costs of a failure. That is how the economy works generally. What is distinctive about banking is that generally depositors do not take the losses of a failure. Depositors are meant to be taling a small risk, but governments bail them out. This is the market failure.

It is a myth that bank shareholders did not bear significant losses in the GFC. In the depth of the crisis shareholders lost more than 80 percent of their investments, a multi-trillion-dollar loss, that dwarfed government capital injections Generally, investors were not bailed out.

Two Pinocchios

"So that reward has been in excess of the risk. We're saying 'let's better balance risk. So we're doing two things at once, we're lowering the risk through more capital, and if investors are struggling to say 'while there's a lower risk,' they should expect to get lower return."

"When I was running the NZ Super Fund we wanted to be rewarded for the risk taken. If we could find excess reward that was fantastic, let's go there. But for the banking system as a whole it's too critical. The fear of failure would create failure so we're saying 'let's reduce the risk,' and hence expected returns on equity would probably decline."

But will the expected returns decline, that is the multi-billion dollar question?

In terms of what's being proposed by the Reserve Bank, Orr says the central bank and prudential regulator is working from the perspective of society's risk appetite, not any particular bank's risk appetite.

"We're trying to calibrate it to society's risk appetite rather than the risk appetite of a particular financial institution," says Orr.

There is no evidence that the Bank actually examined what society's risk preferences might be in the capital review. Did the Bank actually ask any first home buyer if they were prepared to pay $20,000 extra over the term of their mortgage to reduce the risk of their bank failing from 1 in 100 years to 1 in 200 years? Did they ask borrowers if they we prepared to accept lower deposit rates?

Two Pinocchios

"We know that society's risk appetite is less than a bank's risk appetite because banks get to privatise their earnings but get to socialise their losses. If they fail it's us, it's taxpayers, current and all future citizens, who have to pay for that bank failure. So we're trying to get a better balance. More capital means a safer bank. It means a lower risk bank, which means that they will have a better credit rating themselves, and it means that society is in a better, safer and more efficient position."

The argument that society's risk appetite is lower than the banks' doesn't necessarily follow. Again, banks don't get to socialise their losses much, depositors do. The Bank has introduced OBR in an attempt to internalise this externality. The Bank seems to have entirely forgotten about the OBR in its analysis, or they are conceding that it will never be used in practice. Safer banks don't automatically mean more efficient banks. Banks' credit ratings probably won't change, because the parent rating will set a ceiling and New Zealand capital requirements are unlikely to affect that (the New Zealand subsidiaries' standalone ratings might improve though).

One Pinocchio

*Asked about criticism of a lack of cost-benefit analysis in the Reserve Bank consultation paper **Capital Review Paper 4: How much capital is enough?**, Orr said the fact the Reserve Bank has talked about potential for higher mortgage rates, lower deposit rates, credit rationing by banks and an impact on Gross Domestic Product shows it is thinking about the benefit-cost analysis.*

Thinking about, and then mostly ignoring the cost evidence, is not a cost benefit analysis.

Two Pinocchios

"*What we're saying is that we believe more capital, and better quality capital, could cost a bank something. And we're not hiding from that. We think around 20 to 40 basis points additional premium between the costs at which they borrow and lend will be passed on because of them having to raise equity rather than just leveraging debt. So we're not hiding from that," Orr says.*

The Bank might not be hiding from the higher costs, but it has tried to minimize them. They have never tried to explain those additional cost in terms of what that will mean to many New Zealanders or calculated the aggregate costs. In the non-technical summary, they were described as minimal. Cost played no part in its decision making.

Two Pinocchios

"*But the wider benefit is that their total risk is lower, their ability to attract equity will be cheaper because the investors will have a lower expected rate of return because they are a safer institution, and then beyond that the cost to the economy because we have more capital, safer institutions, our whole credit rating will be better."*

The key question is whether the Australian bank owners will lower their expected return on their New Zealand investments. The Governor is just hoping that they will. Standard and Poor's have already said that the main New Zealand banks' credit rating is unlikely to improve. (**Two Pinocchios**

There's no shortage of people wanting to grow their balance sheets. Likewise the bigger end of town could issue their own debt. It doesn't always have to go through the banking system. So there are so many other things *that could happen. It's not a 'hold everything else this will happen'."*

Yes, many things could happen. The point is what is most likley to happen. The existing New Zealand domestic bank's might want to growth their balance sheets, but they won't be able to because they will have to meet a higher capital requirement.

"We want to all agree where we want to get to and then we can talk about what makes sense getting there. The interesting thing of course is that markets are forward looking ...we want to work with you, we want a sound and efficient and profitable financial system just as you do. Let's work through this properly. The current situation is sub-optimal, let's get to an optimal situation in a way that doesn't kill us on the way there."

The Governor is just asserting that the current situation is sub-optimal. Working through things properly, includes genuine consultation and openness to other ideas and evidence. The Governor appears to have a closed mind on the endpoint.

Over the course of the Capital Framework Review, hundreds of New Zealanders will have contributed to the many submissions made on the papers published to date. These are New Zealanders with deep knowledge of the local financial markets and passionate about what is needed for the New Zealand economy to be successful. To date not one point differing from the RBNZ's proposals has been accepted.)

Two Pinocchios

Total Pinocchios: 14 

A speech delivered to the Institute for Governance and Policy Studies, Victoria University in Wellington, New Zealand by the Deputy Governor

Today I'd like to talk about how we are proposing to improve the lives of all New Zealanders by making New Zealand's banking system safer, and how the recent proposals by the Reserve Bank with respect to minimum capital requirements will do just that.

The lives of the New Zealanders who have to pay higher mortgage interest or receive a lower deposit interest rate will not be improved.

Two Pinocchios

Since the late 19th century, New Zealand has only experienced two banking crises, one in the late 1880s and early 1890s, which resulted from a credit-fuelled rural land boom in the 1870s, while the other occurred in the late 1980s and resulted in the Bank of New Zealand having to be recapitalised by the government and its shareholders.[2] *Perhaps one banking crisis per lifetime is one too many?* [3]

The failure of the BNZ was not a banking crisis as commonly defined. It was the failure of a single largely government owned bank, which engaged in some madcap lending with a capital ratio of just 5 percent

One Pinocchio

The Potential Impact

The Reserve Bank has several options for resolving a failed bank. Under any of these options, there would likely be at least some level of disruption to the banking system as depositors would lose access – at least temporarily – to some or all of their *deposits. It is also possible that depositors may never recover the full value of their original deposits*.[5]

With a direct Government intervention there would be no loss of access to deposits. If the OBR was used with a main bank, a haircut of 10 percent (equivalent to a risk weighted capital injection of about twenty percent) would be sufficient The OBR is designed so the failing bank would open for business the next day. Depositors would then have access to their remaining deposits.

One Pinocchio

We would expect that the impact of bank failures would be broader and harsher the larger and more intertwined the failed banks are with New Zealand's economy ….This could mean that it may be more difficult for individuals to borrow to buy a car or home or pursue further education, and businesses may have trouble borrowing to meet their short-term cash flow needs. The decrease in available credit could have disastrous impacts on New Zealand's economy.

Most of this will happen anyway in a stress event, regardless of whether a bank has a 13 or an 18 percent capital ratio. The 'disastrous impacts' claim is a gross exaggeration.

Three Pinocchios

While it is likely that the Reserve Bank would intervene to resolve a failing bank before it is in a negative capital position (i.e., the Reserve Bank would begin the resolution process when the value of assets exceeds liabilities), it is difficult to determine exactly how the bank's remaining value (and losses) would be allocated among creditors (including depositors) and shareholders. However, what is known with greater certainty is that creditors (including depositors) will realise more value in the failed bank if the bank has a greater proportion of shareholder capital.

The last statement is literally true if holders of tier two capital (subordinated debt) are counted as creditors. But they provide equal protection to depositors and/or the government as shareholder capital in a resolution, so the statement is misleading.

One Pinocchio

Social Costs of Bank Failures

International agencies like the World Bank, the World Health Organization, and the United Nations have investigated the economic and social impacts of financial crises.

None of these agencies had anything to say about the marginal effect of higher capital on the social costs of economic downturns. All downturns have wider social costs. The question is how does higher capital help.

One Pinocchio

Since the 1970s, there have been more than 140 banking crises around the world.

The great bulk were undeveloped countries and former communist transition economies. There have been a much smaller number of crises in developed countries which are good comparators for New Zealand.

One Pinocchio

I want to spend some time on the impacts of banking crises on wellbeing.

If you ask someone who's lived through a banking crisis, they'll likely tell you that the impacts were not only significant, but lasting. Perhaps the person you talk to may have lost their job as a result of the crisis, and if not, it might have been their spouse, a friend, or a neighbour. Maybe you speak to a young couple that had purchased their first home just prior to the crisis, only to see its value decline by 30% in the months following the crisis, forever altering their outlook on the economy and their willingness to make another significant investment.

Banking crises did not cause the downturn in house prices in the GFC. Rather, in the US, the fall in house prices was a cause of the crisis. The housing market turned in 2006 as the subprime lending 'scams' started to unwind. In no other country (with the possible exception of Iceland) did house prices declines make a decisive contribution to bank losses. In Ireland housing loan losses were dwarfed by commercial losses.

Ian Harrison did talk to two homeowners who lost their house in the GFC. It was at a wedding in Mexico in late 2009. They had just mailed in their keys on a house (they had purchased at the peak of the boom without a deposit) to the bank. But immediately before doing so, (while their credit record was still intact) they had purchased a similar, but now cheaper, house (with just 5 percent down – funded from their credit cards). California has a no-recourse law so only the bank lost on the first house. The couple were staying in a luxury hotel in Mexico City and were planning a trip to New Zealand - again all on the credit card. They seemed happy enough at the time and given their (to me) high-risk, but rational, behaviour they are probably sitting on a Californian real estate fortune now.

Two Pinocchios

.. maybe you speak to someone who just graduated from university prior to the crisis, only to enter a depressed labour market, and forced to accept work well below their educational qualifications and abilities, forever altering their desired career path.

New Zealand has had many recessions where this has been the case, where there was no banking crisis. We doubt if the career paths of many of those affected were forever altered

One Pinocchio

For those that lived through the recession we experienced here in the early 1990s, you will recall that some industries were decimated, and a generation of workers lost. Many of these workers were not able to re-enter the workforce easily and lost valuable skills while trying to find suitable employment. And while recessions sometimes occur in the absence of a banking crisis, it is common for banking crises to ultimately result in recessions.

The 1990s recession was not caused by the failure of the BNZ. Both were the fall out of the irrational exuberance of the 80's, with the recession being exacerbated by the restructuring of the economy and the RBNZ's tight monetary policy

Four Pinocchios

The average New Zealand bank gets around 92% of its money by borrowing it. Compare this with the average business in New Zealand, for which this figure is about 55%

It is not clear to me why this discrepancy between banks and other businesses is so large, but perhaps at least part of it can be explained by the fact that, historically, governments have been much more reluctant to allow a bank to fail than other types of businesses, which may lead banks to operate closer to the edge.

The Deputy Governor does not appear to understand that banks are financial intermediaries, not widget manufacturers. An important economic role is to take people's money and lend it to businesses and households more efficiently and safely than individuals can do it themselves. A widget manufacturer's leverage ratio provides no guidance on what is socially optimal for financial intermediaries.

Three Pinocchios

What is 'skin in the game' and why is it important?

Put simply, skin in the game refers to the concept of having to bear the consequences of one's own decision-making.

By having minimum 'skin in the game' requirements, banking regulators ensure that the owners of a bank have something at stake, something to lose. I would like to note that banks themselves lend on these very same 'skin in the game' principles, for example, by requiring mortgage borrowers to provide a deposit.

The regulatory measure of capital understates the amount of 'skin' banks already have in the game. They are also putting their franchise value, which they will lose if they fail, at risk. The franchise value of the major banks represents the excess of market determined shareholders equity over net assets. All of the main banks trade substantially above book value showing their franchise is worth much more than their regulatory capital.

Two Pinocchios

We believe that more 'skin in the game' for banks will result in:

Society being less at risk from banking crises. Because more capital means banks are more likely to survive large unexpected shocks, society is also less at risk from the economic and social fallout that usually accompany bank failures.

This ignores the fact that main banks are subsidiaries that will still be dependent on the financial health of their parents, which will be little improved by an increase in New Zealand bank capital. S&P have already said that the big four New Zealand banks' credit ratings are unlikely to change because of this effect.

Two Pinocchios

Reduced fiscal risk. When the probability of a banking crises is reduced, so is fiscal risk.

Fiscal risk can be reduced by subordinated debt, at a fraction of the cost of shareholder capital

Two Pinocchios

Bank shareholders and management being less inclined to take excessive risks.

Beware the law of unintended consequences. Banks might take more risk to meet their current rate of return targets.

Two Pinocchios

There were other threads of analysis that supported our proposals. A comprehensive review of the international literature told us that we were within the range of capital ratios that were appropriate.

This is misleading. On a like-for-like comparison the weight of evidence from international studies considered is that the optimal capital ratio is significantly lower than the RBNZ's proposal. In addition, the international studies all leave out the direct cost to borrowers and depositors, so should not have been used without adjusting for this omission.

Two Pinocchios

Furthermore, building on analysis that began in 2012, we looked at the implications of representing society's risk appetite differently. This analysis took into account New Zealand specific factors and captured household risk-aversion. [18] *As with findings from similar types of analysis in the international literature, there is a wide range of plausible calibrations. However, this analysis ultimately showed that a capital ratio of 18% (or 17%) is in the mid-point of our range of estimates for the 'optimal capital ratio' for New Zealand*.

This gives the impression that the Bank actually used its New Zealand models in this analysis. That is not true. They got the NZ capital model going again in 2016, but it played no part in their decision making. The Regulatory Impact Statement showed a model-based optimal capital ratio of 13 percent. The later FSO report showed a ratio of 17-18 percent, but the difference was not explained. The original model understated the cost of capital by a large margin, and using the Bank's current cost estimate, the optimal capital estimate would have been materially lower.

Three Pinocchios

Comparisons of capital ratios

The Basel Committee has published tables of capital ratios for a group of large banks operating in its member jurisdictions. Credit rating agencies are another source. For *example, Standard & Poor's calculates its own risk-adjusted capital ratios for many banks around the world, using a methodology that attempts to reduce the influence of differing national applications of the Basel framework while still taking into account the different risk profiles of the countries in which each bank operates*. *While these cross country studies have not played much role in our analysis of determining what we think is the appropriate capital calibration for New Zealand, they do demonstrate that our proposals are by no means extreme. Instead, they move us towards our goal, expressed back in 2017, of capital requirements that are conservative relative to our peers.*

This evades the real issue, which is whether the regulatory capital ratios are higher in New Zealand if calculated using international standards, as argued in the PWC report. The Reserve Bank has had plenty of time to produce its own comparison, as APRA has done, so the absence of a Bank report is telling.

Listing the Basel Committee' table does not address this issue at all. Presenting some, potentially cherry picked, S&P capital ratios does not really help. The S&P ratios have a point-in-time element, as they are affected by short-run movements in house prices and credit growth. If these unwind, New Zealand banks' measured capital ratios will improve. The S&P capital model also tends to a 'paint-by-numbers' approach, designed to work across a broad range of countries, but which does not appear to be work well in New Zealand. It has a set of risk weights, similar to, but generally higher, than the Basel standardised model. The risk weights have been calibrated off a generic stress test outcome. When we compared S&P's implied stress test outcomes with even the most conservative New Zealand stress tests, the S&P losses were a multiple higher. This tells us that the S&P risk weights applied to New Zealand banks are too high and the resulting capital ratios too low.

For what it is worth, the banks in the two countries with the highest S&P capital ratios had the same credit ratings as the main New Zealand banks.

Two Pinocchios

Total Pinocchios:35