Submission to Reserve Bank of New Zealand

on

Capital Review Paper 4: How much capital is enough?

by Michael Reddell

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Introduction and summary

The Reserve Bank's December 2018 consultative document proposed three main changes:

- Much higher minimum ratios of capital (CET1) to risk-weighted assets than previously,
- Higher minimum capital ratios for systemically-significant banks than for other locally-incorporated banks, and
- A significant narrowing in the gap between the calculation of risk-weighted assets as between the big banks using internal models and the remaining locally-incorporated banks using the standardised approach.

This submission outlines my response to these proposals, with a focus on the first of them. Most of the points are developed in greater detail in a succession of posts over recent months at my Croaking Cassandra blog (https://croakingcassandra.com/category/bank-capital-requirements/) which should be read as part of the submission. I also associate myself, to a considerable extent, with the views and analysis contained in two papers on this issue by Ian Harrison (http://www.tailrisk.co.nz/documents/HowMuchCapitalIsEnough.pdf and http://www.tailrisk.co.nz/documents/RBNZ_NewAnalysis_May.pdf).

In summary:

- I **support the proposal to increase the minimum risk-weighted assets calculation** to around 90 per cent of the amount that would be generated, for the same set of assets, using the standardised approach,
- The **90 per cent floor should be regularly highlighted** by the Reserve Bank, both on its dashboard, and in speeches or reports, to assist in the cross-country comparability of bank capital ratios.
- The **case has not been compellingly made for materially higher minimum core capital ratios** (in particular, not on top of the additional capital that the larger banks would probably choose to hold as a result of raising the floor on the calculation of risk-weighted assets),
- Similarly, **no compelling case has been made for imposing a higher minimum capital ratio for systemically significant banks than for small banks**, at least if the minimum capital ratios for all banks are to be as high as we proposed by the Reserve Bank in this consultation.

- The failure to:
  1. Provide a properly documented cost-benefit analysis, with well-documented sensitivity analysis around the impact of key assumptions,
  2. Address in depth the case for much higher capital ratios in light of (a) repeated stress tests results, and (b) the experience of the New Zealand financial system following the credit boom of the 2000s,
  3. Provide a proper benchmarking exercise which would have enabled readers and potential submitters to evaluate your proposals relative to APRA's minimum requirements for Australian banks (and ideally against the requirements of other key overseas regulators),
  4. Provide any serious analysis of how the transition might unfold, both as between classes of institutions (those affected by these proposals and those not), between classes of borrowers and/or funders, and of any risks/costs of disintermediation

  all seriously undermined the credibility of the consultation. Having chosen, apparently by not much more than a stab in the dark, a desired outcome, the attempts to provide substantive insightful supporting analysis seemed half-hearted at best.

- Concerns about the potentially disruptive transitional effect are only compounded when one allows for the likelihood that the next significant economic downturn will occur during the next five years, a period during which - on the Bank's own published projections - there will be quite severely limited conventional monetary policy capacity to respond.

THE CASE AGAINST MATERIALLY HIGHER MINIMUM (CET1) CAPITAL RATIOS

Relevant context

An unbiased observer, looking at the New Zealand economy and financial system, would struggle to find a case for higher minimum capital ratios. Among the factors such an observer might consider would be:

- The fact that the New Zealand financial system has not experienced a systemic financial crisis for more than hundred years (and to the extent it approximated one in the late 1980s, that was in the idiosyncratic circumstances of an extensive and fast financial liberalisation which left neither market participants nor regulators particularly well-equipped),
- Our major banks - the only ones that might pose any serious economywide risks - come from a country with very much the same historical record as New Zealand,
- Despite very rapid credit growth in the years prior to 2008 (increases in the credit to GDP ratios among the larger in the advanced world, spread across housing, farm, and other business/property lending), and a severe recession in 2008/09 and afterwards, the banking system emerged with low loan losses,

- Since then, banks have not only increased their actual capital ratios (and been required to calculate farm risk-weighted assets more stringently) but have also substantially improved their funding and liquidity positions (under some mix of regulatory and market pressure).
- Over the decade, bank credit growth (relative to GDP) has been pretty subdued and there has been little or no evidence (in, for example, Reserve Bank *FSR*s) of any serious degradation of lending standards.
- The balance sheets of the large banks remain relatively simple, and there has been no sign (per *FSR*s) of the sort of financial innovation that might raise significant doubts about the adequacy of existing models.
- In terms of the wider policy environment, government fiscal policy remains very strong, we continue to have a freely-floating exchange rate, and there has been neither legislation nor judicial rulings that will have materially impaired the ability of banks to realise collateral.
- And the Open Bank Resolution option for bank resolution has been more firmly established in the official toolkit (note that if OBR were fully credible then, in the absence of deposit insurance, there would be little case for regulatory minimum capital requirements at all).
- And repeated stress tests - over a period when the regulator had no incentive to skew the tests to show favourable results - suggested that even if exposed to extremely severe adverse macro shocks, and associated large price adjustments for houses, farms, and commercial property, not only would no bank fail, but no bank would even drop below current minimum capital requirements.
- Consistent with this experience - also observed in Australia, the home jurisdiction of the parents of our major banks - the major banks operating here continue to have strong credit ratings (consistent with a very low probability of default), and the ratings of the parent banks are even higher.
- There has been no change in the ownership structure of our major banks, or in the implied willingness of the Australian authorities to support the (systemically significant) parents of the New Zealand banks were they ever to get into difficulty.

Add into the mix indications that New Zealand banks CET1 ratios, if calculated on a properly comparable basis, would already be among the highest in the advanced world - in a macro environment with more scope for stabilisation (floating exchange rate, strong fiscal position, little unhedged foreign currency lending) than in many advanced countries - and there would be a fairly strong prima facie case for leaving things much as they are.

But the Reserve Bank's consultative document - and associated material, including speeches and interviews - engages substantively with almost none of this context.

Closing the gap between the internal models and the standardised approach to calculating risk-weighted assets

There probably is a good case for the Bank's proposal to narrow the gap between risk-weighted asset calculations based on internal models and those calculations if done on a standardised basis (in fact, there would probably be a reasonable case - at least starting from scratch – to get rid of the internal models provision altogether in calculating regulatory capital requirements). This is so even though what the Bank is proposing goes beyond the standard floor that is part of the Basle framework, and is materially more restrictive than is envisaged by APRA (both points which should have been made explicit in the consultative document.)

But on the Bank's own published numbers, that change alone would have increased the capital required by large banks to support their current business by 15 to 20 per cent (assuming banks would choose to maintain much the same margin over the regulatory minimum ratio as at present).

Unfortunately, there is no sign that the Bank has considered this leg separately from the proposal to increase minimum ratios themselves. It is likely - but not certain - that there would be efficiency gains from closing the gap between the two approaches to calculating risk-weighted assets, and in respect of the larger banks it is also likely that there would be some gains in financial stability (reduced probability of failure). It would have been preferable to have analysed the costs and benefits of this proposal first, before moving on to consider whether minimum capital ratios should be raised further. The discipline of doing a proper cost-benefit analysis might have led you to do so. As it is, we are left without any clear differentiation between the benefits and costs of these two, quite separate, strands of what you are proposing (indeed Ian Harrison in his second paper suggests that your belated modelling exercise largely overlooks the impact of closing the gap in the RWA calculation methodology).

Little sign that the Bank has thought hard about financial crises

The consultation document, and supporting material, shows little sign that the Reserve Bank has thought hard about financial crises in bringing together these proposals. There is plenty of discussion of selected research papers, but nothing that stands back and poses plausibility questions.

Thus, there is a strong (implicit) tendency in the document to treat financial crises as exogenous shocks, events arising out of the blue, which a decently-managed bank (or financial system) will face every once in a while, (be it once a century, or two). But a moment's reflection is all it should take to realise that that is simply the wrong approach to be using (especially when, as in this consultation, you are talking of proposals designed to reduce already-low risks to extremely low levels). You could look at the Irish crisis, the Icelandic one, the US crisis, the Korean crisis of the 1990s, the Nordic crises of the early 1990s (and even the New Zealand and Australian experiences in the late 80s and early 90s) to appreciate that the system-threatening problems didn't arise from exogenous shocks, but from several years of very degraded lending standards. Exogenous shocks may have played some part in determining the timing and nature of the crystallisation of the problems, but they weren't what determined that there would be a costly re-adjustment at some point. If the Bank believes differently, the onus should have been on it to make its case. There was no sign of such a case in the consultation document.

Linked to this point, there is very little recognition (none in the main document, and very little in subsequent papers) that many or most of the output losses associated (in time) with financial crises have to do with the misallocation of resources (bad lending, bad borrowing, bad investing) in the preceding boom years. Your documents recognise that one cannot simply measure output losses from a pre-crisis peak (typically a period with a positive output gap) but do not go anywhere near far enough to recognise the significance of this, rather larger, point. In such circumstances, estimates of potential GDP itself may be materially overstated. As far as I can tell, the research papers you quote are open to the same criticism (which is not a defence for the Bank, but - probably – an indication of the predispositions of many of the chosen researchers and their institutional sponsors).

When an economy and financial system has gone through several years of badly misdirected lending, borrowing, and investment, not only is there an inevitability about output losses because of the bad prior choices crystallising, but there is a near-inevitability about both lenders and borrowers being hesitant about doing new business in the wake of the realisation of past mistakes. Prior assumptions and business models prove invalid, and it takes time for risk appetite to revive, and to identify like projects that would prove profitable. That is likely to be so whether or not banks emerge from the crystallisation phase with ample levels of capital. At best, it is only the marginal additional output losses from banks falling into "crisis" (however defined) that is likely to be eased by much higher initial capital ratios - and yet you made no attempt to distinguish this effect.

The Bank also showed no sign of having done any sort of comparative analysis (of that sort done previously on my blog e.g. here https://croakingcassandra.com/2017/07/06/reserve-bank-dtis-and-the-cost-of-crises/, or here https://croakingcassandra.com/2019/03/04/banking-crises-are-bolts-from-the-blue/ or by PIIE's William Cline) comparing the output and/or productivity experiences of countries that underwent financial crises with those that did not. This is particularly important in thinking through the experience around 2008/09, when many countries experienced crises and many others did not, all overlaid on what appears to have been a common global productivity growth slowdown. Reasonable people might differ as to how best to do such an adjustment or assessment, but the Bank shows no sign of having even tried. Any plausible assessment of this sort would, however, conclude that plausible additional output losses saved by reducing the probability of any particular loan book incurring losses large enough to run through capital would be much lower than the estimates the Bank uses. Note also that the Cline methodology still overstates the amount that higher capital ratios alone might save, since his output path comparisons include (for the crisis countries) both kinds of losses - from the initial misallocation of resources, and the pure crises effects. Only the latter should be relevant in assessing the costs and benefits of higher minimum capital ratios.

I don't propose to spend any material time on the temporary vs permanent distinction, but again it should involve no more than a moment's introspection to realise the implausibility of supposing that a financial crisis 100 years ago (and, as a reminder, the US had many such crises) is still affecting the level of output in the crisis country today. Pure financial crisis effects on output are typically temporary, and are much smaller than the Bank allows.

The Bank also shows little sign of having given sufficient weight to the fact that New Zealand has a floating exchange rate. There seems little doubt that a fixed exchange rate regime - especially when it involves a small country pegging to a currency the economy of which it is not well-aligned with - can exacerbate booms and complicate the management of busts, and the speed with which output resumes a normal growth path. Ireland and Greece offer two recent examples. All else equal, a fixed exchange rate (or common currency) should probably be accompanied by higher minimum capital ratios than otherwise. But that isn't the New Zealand system: we have a floating exchange rate, Australia has a floating exchange rate, and neither currency has safe-haven characteristics (thus in economic downturns and risk-off events the exchange rate tends to fall readily and substantially). The importance of this point to thinking about financial stability and economic adjustment in New Zealand was highlighted several years ago in a *Bulletin* article by Hargreaves and Watson.

More specifically, it is not clear that the Bank can cite a single example of a systemic financial crisis in an advanced economy that has had liberalised markets for some time, has a floating exchange rate, and where the government has not played a considerable role in steering lending. As is well known, the state plays a very large role in the US housing finance market, in a way not seen in (for example) New Zealand, Australia, or the UK.

Social costs

In the Deputy Governor's speech and the April paper, the Bank makes considerable play of the alleged social costs of financial crises. Here I endorse Ian Harrison's treatment of these, largely specious (particularly in an advanced economy), arguments. I would also note that none of the papers invoked in support of the social cost arguments make any attempt to distinguish between the costs of crises themselves and the costs of the initial misallocation of credit and investment resources. Again, only the former could possibly be relevant to the minimum capital question, even if there were evidence of significant additional social costs in advanced economies with decent social safety nets. Banks with 50 per cent capital ratios may still accommodate demand to finance bad projects, and that bad lending/borrowing/investment will have real economic costs - perhaps even real social costs - even if no bank ever comes close to failing.

Economic cost of the higher capital ratios themselves

In his speech in February, the Deputy Governor indicated that the Bank's own analysis suggested that the output cost of the proposed higher capital ratios would be "up to 0.3 per cent" of the level of GDP. In other words, the annual insurance premium society would pay - even on your assumptions - might be 0.25 per cent of GDP. As you note, the standard Treasury discount rate is a bit larger than what is used in many of the papers you cite, and applying such a discount rate to this expected annual cost gives a present value of lost output of perhaps $15 billion. That is a high hurdle to get over when the gain on offer is the reduced (from already low levels) probability of output losses resulting (narrowly) from a financial crisis expected in, on average, 75 or 100 years' time (your claim is that you want to keep the probability of crisis to no more than once in 200 years). On plausible estimates of those marginal additional output loss savings, the cost-benefit simply would not stack up. (And as Ian Harrison notes, none of these numbers appear to take account of the income loss to New Zealanders from imposing higher capital requirements on - and thus requiring higher expected equity returns to shareholders of - foreign-owned banks.)

Linked to this, citizens risk being forced to pay a premium upfront (lost annual output) with no certainty (probably not even a high likelihood) that the policy will be persisted with for long enough to generate any material expected gains at all. Reserve Bank policy decisions are made by a single decisionmaker, who is unlikely to be round for more than 10 years in total. Current plans to review the governance of the Bank could well result in decision-making being shifted to people with different risk preferences, different assessments of the costs and benefits of the policy etc. Scarcely any policies remain materially unchanged for 50 or 100 years, and this is one that is easily reversible (not like, say, building a flood stopbank that once built stands for decades). A serious assessment of the Bank's current proposal would put at least a higher weight (than implied simply by the discount rate) on the certain costs in the early decades than on the possibility of some eventual benefits decades hence if (a) the policy is persisted with, and (b) the current sense of the distribution of crises probabilities and costs is correct. The Bank - let alone the current Governor - simply can't pre-commit. That inability matters in circumstances like these.

No benchmarking

It is grossly unsatisfactory that throughout months of consultation the Bank has made no effort to illustrate how its proposals for minimum CET1 ratios and the associated floors around the calculation of risk-weighted assets, compare with those planned by APRA for the Australian banks.

Such an exercise should have been relatively straightforward, especially if the Reserve Bank had done what most New Zealanders might reasonably have expected, and worked closely together with APRA in formulating its proposals. Of course, New Zealand is a sovereign nation and the Reserve Bank (regrettably) has final decision-making powers in New Zealand but:

- APRA has a considerably deeper pool of expertise, including at the top of the organisation, than the Reserve Bank of New Zealand,
- The nature of the risks in the two economies and markets is quite similar (including similar legal institutions, and similar housing markets),
- If anything there is a case for thinking that APRA minima would be ceilings below which New Zealand requirements for our large banks should be set (since we have the benefit of strong parent banks, and well-regarded supervisor of those banks, whereas the parents - and parents' supervisors - themselves are on their own, and we have also chosen to have the OBR as a frontline resolution option),
- For the institutions that might pose potential systemic issues in New Zealand, any substantial increase in capital requirements can reasonably be seen as an attempt to grab group capital for New Zealand. Why not work these things out together?

The onus should, surely, be on the Reserve Bank of New Zealand to demonstrate - make the case in detail - why the New Zealand subsidiaries of Australian banks should be subject to more onerous capital requirements than the parents, and banking groups as a whole, are subject to. But not once has the Reserve Bank attempted to make that case.

The Bank has also been deficient in not engaging in any analysis to show why it is necessary or appropriate to impose higher CET1 capital ratios on large banks than we observe for (typical) financial intermediaries where there is little or no likelihood of bailout and no deposit insurance. That, surely, is closer to the relevant test than handwaving about bank capital ratios from, say, 100 years ago (when the composition of asset portfolios was very different) or about debt-equity ratios observed in firms in other economic sectors. The latter in particular offers no useful insights at all, without much more in-depth analysis.

Finally, in this area, the Bank has made no serious attempt to engage with the probability of failure implied by the current standalone ratings the large banks have. These appear to be less frequent than once in 200 years. Those default probabilities appear consistent with the Bank's assessment, in successive FSRs, about the soundness of the financial system, but not with these proposals, under which it is claimed that much more capital is required to put banks on a secure footing.

Transitional effects and the path to a new steady state

One of the most glaring omissions from the consultative document, and subsequent material, was any sustained analysis of how the financial system and the economy would react if the proposals the Bank is consulting on were implemented. The absence of any such analysis means that we can have no confidence that the Bank, with all the resources at its disposal, has thought through the issues and risks in depth themselves.

The only estimates we've seen have been those for possible changes in lending margins for institutions affected by the proposed higher capital ratios. There has been no serious analysis published of the extent to which banks might become less willing to lend. And there has been no discussion about the extent to which business may migrate from regulated banks to either unregulated (i.e. not locally incorporated) banks here or abroad, or to finance companies, or of the possibility of disintermediation (such that more of society's demand for credit is met without the direct interposition of a financial institution's balance sheet). There has been no analysis of which economic sectors might be most severely affected. Large corporates for example will have plenty of alternative providers, probably at a price very similar to what they pay now, and many housing mortgages could be relatively easily securitised if necessary, but SMEs and rural borrowers might be more likely to bear the brunt of any price or capacity adjustment. Similarly, there was no analysis of where the brunt of any adjustment to deposit and wholesale funding interest rates might fall, but it seems reasonable to posit that wholesale creditors will not bear most of the burden.

Perhaps more concerningly still, there is no sign of any analysis of whether a financial system in which more business has gravitated to institutions not locally-incorporated or to disintermediated markets would be (a) sounder, and (b) more efficient. There is a risk that the core banks (already low risk) become somewhat safer, but that those institutions in future have a diminished role in the system.   Most of the Bank's analysis appears to, in effect, treat locally incorporated banks as the sum of the financial system, which is less likely to be the case in future if these proposals proceed. Failure to address these issues does not instill confidence.

Finally, in this section, there was no discussion at all of the macroeconomic context in which these proposals would take effect. The proposals involved a transition over five years. Nine years into an economic recovery, with slowing domestic growth and growing global risks there has to be a fairly significant chance that the next significant recession will occur in the next five years (i.e. during the proposed transition period). That means a significant risk that regulatory policy would be exacerbating any downturn (through tighter credit constraints, reduced credit appetite, and potential higher pricing), in a downturn in which monetary policy is likely to be hard up against conventional limits (the Bank's own analysis has suggested the OCR might be able to be cut only to around -0.75 per cent). Of course, if bank balance sheets were looking shaky it would be prudent to move ahead anyway - better ten years ago, but if not then now - but nothing in the Bank's published analysis (past FSRs, stress tests, consultation document) nor in the credit ratings of the relevant institutions suggests anything like that sort of vulnerability. Without it, you will - with a reasonable probability - make economic management over the next few years more difficult (additional upfront potential economic costs), in exchange for the modest probability of making any real difference to (already very low) financial system risks over that period. It isn't a trade-off that appears to be worth making - at least not without much more supporting analysis than we have had to date.

Anti-Australianism

There has been a consistent subtext throughout the period of consultation that has the Reserve Bank antagonistic, or at best, indifferent to Australia and the Australian-owned banks.

To be positive, it is probably marginally preferable to an alternative in which the Reserve Bank is subject to regulatory capture, identifying the public interest with the interests and views of the Australian banks, with whom they deal all the time. But the Bank simply has not demonstrated that it has got the balance right.

We see this is the passive-aggressive approach to APRA, who were not apparently consulted in any depth as the proposals were brought together and were only shown the consultation document on the morning it was released (according to a timeline in one of the documents the Bank released in January).   As already discussed, the Bank has made no effort to benchmark its proposals against the requirements APRA will be imposing on many of the same banking groups, or to explain why it believes what APRA is proposing is not nearly demanding enough for New Zealand.

We've also seen it in rather glib comments that perhaps the Australian banks might sell down their stakes in their New Zealand subsidiaries, in a tone which implies that Reserve Bank senior managers think this might be quite a good thing.   Anti-Australianism is a recurring theme in New Zealand political debate around banks, but it should have no place in the assessments or public comments of officials operating under the Reserve Bank of New Zealand Act.

In my view, New Zealand benefits considerably - in terms of financial system soundness and efficiency - from the fact that the major banks are all part of much larger banking groups, each headquartered in a friendly country with good institutions, and strong record of financial stability. The Reserve Bank should not lightly jeopardise that situation with proposals that simply aren't backed by robust analysis of the risks they are supposed to mitigate or of the costs of adjustment.

CONCLUSION

The Reserve Bank has simply not made a compelling case for an increase in minimum capital ratios that, taken together with the conservative manner in which these ratios are calculated here, would appear likely to position New Zealand with among the very highest core minimum capital ratios anywhere in the advanced world. Without a compelling case, citizens will pay a significant annual insurance premium upfront, with a relatively low probability of ever realising any benefit from the policy. Moreover, owners of private businesses would be coerced into altering their business models without any robust *ex ante* cost-benefit analysis to support such a regulatory imposition.

The Bank's documents show little sign that it has thought seriously and deeply about the nature, character, and costs of 'financial crisis' - all the more troubling since one of the benefits the Bank sometimes claims for having supervision in the same institution as (macro-focused) monetary policy is that it supposedly allows a richer, more multi-dimensional perspective on relevant financial stability and macroeconomic issues. None of that has been on display in this consultation.

Serious recessions are things to seek to mitigate. That is primarily the role of discretionary monetary policy, made possible by a floating exchange rate. Serious misallocations of resources are likely to be costly, but the misallocations arise in the good times - when credit is growing strongly - not in the subsequent bust. The marginal additional losses arising from financial crises themselves appear to be (typically) small, and these proposals in any case involve only a further modest reduction in an already low risk of serious problems (in a country with little history of serious systemic financial problems).

There are limits to what any regulators and officials can do about initial misallocations, but my recommendation to the Bank would be to abandon the push for higher minimum capital ratios (while proceeding to level the playing field between advanced and standardised model banks) and to focus its energies instead on sharpening its ability to recognise, and respond vigorously to, any sharp deteriorations in lending standards promptly when and if they get underway. Complement that with robust championing of (a) the importance of the floating exchange rate regime - especially in a country with neutral interest rates higher than the rest of the world - and (b) of keeping the government out of the business of directing credit and, together with existing demanding capital standards, you are likely to best serve the interests of New Zealanders. Better that approach than the (probably costly) steep increases in capital requirements proposed in the consultation document without anything like adequate, carefully and independently scrutinised, supporting analysis. New Zealanders deserve better than they have had in the poor process and weak substance that together made up this consultation.