18 December 2018

RBNZ Proposed Capital Requirements: Preliminary Thoughts

- **The RBNZ has proposed to significantly increase capital requirements for NZ banks over a five year period. Here we outline our preliminary thoughts on the market implications.**
- **From a macro perspective, the significant increase in capital requirements is likely to increase banks' cost of funding and may lead to higher lending rates for the real economy and/or a lower supply of credit. The impact on the economy is uncertain, but the changes are a headwind and directionally point to lower OCR expectations.**
- **To the extent that the proposal drives a greater wedge between bank lending rates and the OCR, it implies a lower neutral OCR. At face value, this suggests lower intermediate to long-end NZ rates, which embed terminal rate expectations.**
- **NZ bank senior debt spreads should tighten based on the future increase in bank equity capitalization.**
- **Wholesale bank debt issuance may slow in the future, especially if credit growth is materially affected. If NZ banks reduced offshore debt issuance, this would point to a lower NZD cross-currency basis.**
- **A lower proportion of debt in banks' capital structures would point to less growth in bank holdings of NZGBs and other liquid assets for prudential purposes.**

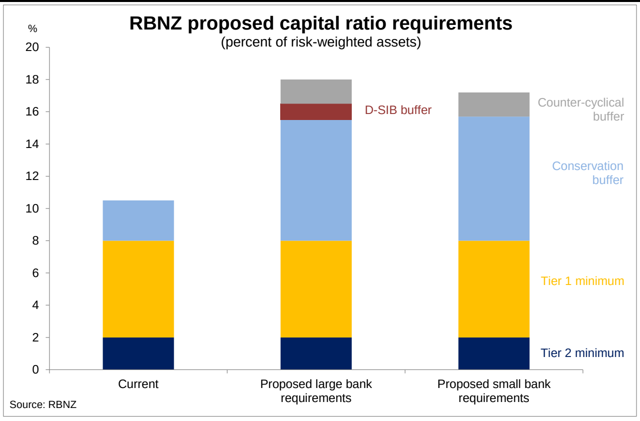
Brief summary of RBNZ proposal

Last Friday, the RBNZ released a consultation paper proposing to increase the required Tier 1 capital ratio from 8.5% to 16% for the "Big 4" NZ banks (15% for smaller banks). Additionally, the RBNZ proposed to increase the "IRB scalar" applied to model-based risk-weighted assets (RWAs) from 1.06 to 1.2. This will also have the effect of further increasing large banks' capital requirements.

The Big 4 banks currently have a Tier 1 capital ratio of 13.4% compared to the current regulatory minimum of 8.5%. The RBNZ estimates that the Big 4 would need to raise $12.8b additional Tier 1 capital to meet the proposed 16% regulatory minimum (see Table 1, adapted from the RBNZ's consultation paper).[1] Given banks tend to hold a voluntary buffer above the regulatory minimum, the required capital increase will likely be greater than this. Assuming banks held a hypothetical 2% buffer above the minimum (i.e. targeting an 18% Tier 1 ratio), this would imply the Big 4 banks needed to raise an extra $18.6b.

[1] This assumes the balance sheet remains the same size. Were the balance sheet and RWAs to grow from here, more capital would be required.

Chart 1: RBNZ proposed changes to capital requirements



The Big 4 NZ banks are wholly owned by their Australian parents. The RBNZ estimates that the Big 4 would be able to achieve the 16% minimum target over a period of approximately 5 years using retained earnings (assuming 6% nominal credit growth and a stable return on interest-earning assets).

The consultation period ends on March 29th and the RBNZ will announce its decision by June 2019. The RBNZ has proposed a five year implementation period given the significant changes proposed.

Table 1: Capital impact for IRB banks (i.e. the "Big 4")

Total assets $b	445
Current RWA $b	251.1
New RWA (post floor and scalar, $b)	290
Current Tier 1 $b	33.6
Current Tier 1 as percent of current RWA	13.40%
Proposed Tier 1 using 16% of RWA, $b	46.4
Increase required in Tier 1 $b	12.8
Non-compliant AT1 to be replaced $b	6.2
Tier 1 using hypothetical 18% of RWA, $b	52.2
Increase in Tier 1 using 2% buffer	18.6

Source: RBNZ.
Total assets as of end-Sept - see https://bankdashboard.rbnz.govt.nz/capital-adequacy

Macro and rates implications

Since equity is the costliest form of funding (as it is the riskiest), the RBNZ's proposal will likely mean average funding costs for banks will increase. The RBNZ's survey of international studies suggests that a reasonable estimate is that a 1% increase in Tier 1 capital from current levels would increase the price of bank credit by 6bps. That would point to an approximately 25bp increase to large banks' overall funding costs based on an increase from the current ratio to the proposed 16% minimum.[2] Were banks to hold a hypothetical 2% buffer, for instance, that would point to an approximately 40bps increase in banks' funding costs.

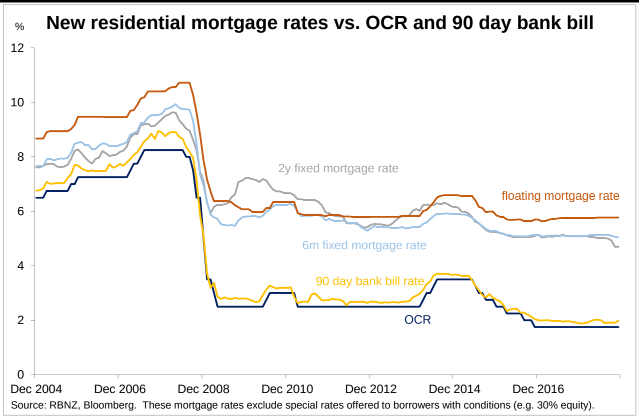
In turn, higher funding costs for banks might be passed on via higher lending rates or result in less supply of credit to the real economy. The RBNZ says it expects the impact on real economy lending rates to be "minimal". This could be because the RBNZ expects banks to absorb the increase in cost via margins. However, it raises the prospect that the RBNZ might seek to offset any future increase in real economy lending rates with further delays to rate hikes, or even OCR cuts.

Directionally, the proposed changes would seem to be negative for growth and raise the hurdle for OCR hikes further. The RBNZ's survey of international studies points to a relatively minor impact on growth (a 0.03% decrease to the steady-state level of GDP for each 1% increase in Tier 1 capital), although there is likely to be considerable uncertainty around those estimates. Either way, the changes will add to the growing market perception that the OCR will be lower-for-longer and help keep short-term interest rates relatively capped for now. It adds to the risk that the first OCR hike is later than our current November 2019 forecast (especially when combined with the recent falls in oil prices and rise in the NZD, which should weigh on headline inflation over the coming year).

To the extent that the proposed changes do transmit to real economy lending rates or result in credit rationing, the straightforward implication is that the neutral OCR will be lower.[3] Were banks to increase lending rates by 40bps for instance, independent of the OCR, this would imply a lower neutral OCR by an equivalent amount. This would point in the direction of lower rates in the mid-to-long end of the NZ curve, which embed expectations of the terminal policy rate. The 5y5y forward swap rate is consistent with the market pricing a terminal OCR of around 3% currently.

The rates market implications are directionally bullish, especially for the mid-to-long end of the curve. But much depends on the final form of the capital requirements (expected mid-next year) and the reaction of the Australian parent banks. Additionally, the changes are planned to

Chart 2: Mortgage rates have risen vs. the OCR since GFC



Source: RBNZ, Bloomberg. These mortgage rates exclude special rates offered to borrowers with conditions (e.g. 30% equity).

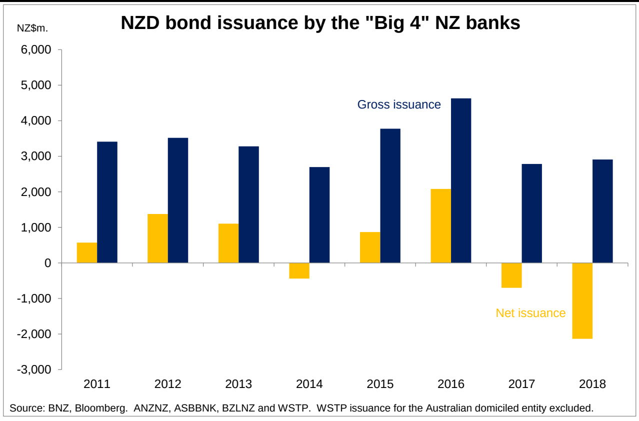
be phased in over a five year period, so it may take some time for the effects to be visible. Broader macroeconomic developments should remain the main driver of short-term NZ rates until there is more visibility on the likely consequences of the bank capital plans.

Supportive of bank debt

The RBNZ's proposed increase to bank capital is supportive of senior bank debt given the significant increase in banks' capitalisation. A 16%+ Tier 1 capital ratio will mean a much lower probability of default. We would expect senior spreads to grind tighter, even though the capital increase is planned to take place progressively over a five year period (meaning shorter-dated bonds will not benefit to the full extent from the increase in Tier 1 capital planned).

5 year senior NZ bank paper is currently trading around 100bps over swap. Net supply of bonds in the domestic market by NZ banks has been negative for the past two years, which is an additional supportive factor for spreads.

Chart 3: Gross and net issuance of NZD debt by the Big 4



Source: BNZ, Bloomberg. ANZNZ, ASBBNK, BZLNZ and WSTP. WSTP issuance for the Australian domiciled entity excluded.

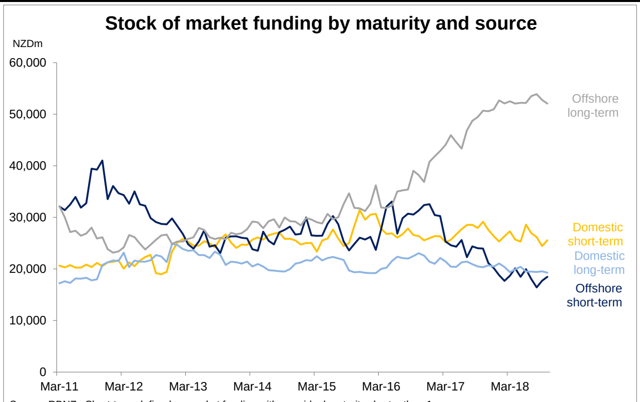
[2] Adjusted for the RBNZ's proposed change to the calculation of RWAs for the IRB banks, the Big 4 had an 11.6% Tier 1 capital ratio. A 4.4% increase in Tier 1 capital multiplied by the 6bp multiplier implies a 26.4bp increase to the price of bank credit.

[3] A higher spread between real economy lending rates and the OCR is one factor that suggests the risks to the RBNZ's median 3.5% neutral rate estimate is to the downside. See our note from earlier in the year.

Bank debt issuance and the NZD cross currency basis

What happens to the future supply of bank debt will depend on credit and deposit growth. Over the past five years, deposits have grown just over $100b vs. domestic credit growth of $110b. The shortfall between deposit and credit growth was made up by long-term offshore market funding. In contrast, the stock of domestic market funding and short-term offshore funding fell (see Chart 4).

Chart 4: NZ registered banks' stock of market funding



Source: RBNZ. Short-term defined as market funding with a residual maturity shorter than 1 year.

Looking ahead, there will likely be some downward pressure on term deposit rates, which should reduce deposit growth. The clear risk though is that wholesale debt issuance slows during the implementation of the new capital requirements, especially if credit growth is materially affected. Since offshore long-term funding is the most costly form of senior debt at present (see Table 2), it seems most at risk of being affected.[4]

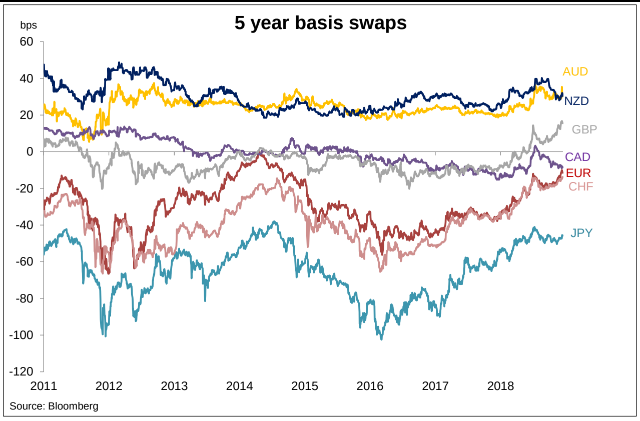
Table 2: Relative cost of various bank funding options

Method of funding	Proxy	spread to swap
Term deposit	6 month term deposit - spread to 5 year swap	90
Short term domestic	BKBM	0
Short term offshore	NZD implied cost of funding via 3m USD Libor and FX swap	30
	NZD implied cost of funding via 3m Euribor and FX swap	37
Long term domestic	Nov23 BZLNZ - spread to swap	100
Long term offshore	USD Mar23 BZLNZ - spread to NZD swap	129
	EUR May23 BZLNZ - spread to NZD swap	117

Source: BNZ, NAB, Bloomberg

If NZ bank issuance offshore were to slow, then we would expect this to put downward pressure on the NZD cross-currency basis, all else equal. The NZD and AUD cross currency bases are positive, unlike most countries (see Chart 5), which we attribute primarily to NZ and Australian banks' structural offshore funding programmes (the proceeds of which are swapped back to domestic currency to fund local balance sheets). In NZ's case, this effect may be lessened if offshore issuance slows.

Chart 5: 5 year cross-currency basis swaps



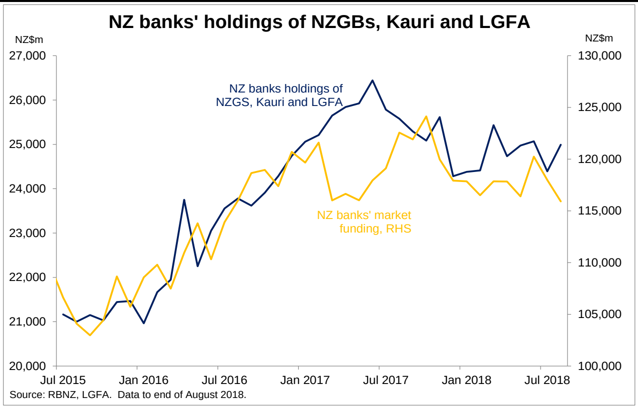
Source: Bloomberg

Potentially less growth in bank's HQLA going forward

While the RBNZ proposal is primarily focused on the liability-side of bank balance sheets, there may be implications for the composition of banks' liquid assets going forward as well. Banks hold NZGBs and other prudential liquid assets, in part to meet the RBNZ's Mismatch Ratios (akin to the LCR).

If banks were to reduce wholesale funding for instance, over time there would be less need for banks to hold liquid assets to meet outflows. If banks' wholesale funding grew at a slower pace than it has done over the past three years, it would also suggest that bank demand for NZGBs and other liquid assets would increase more slowly (see Chart 6). In time, this might be expected to put some marginal upward pressure on NZGB yields relative to swaps, although we expect this should be second-order compared to the NZGB supply outlook and broader trends in investor demand.

Chart 6: Less market funding may mean less HQLA



Source: RBNZ, LGFA. Data to end of August 2018.

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4 The RBNZ has a minimum Core Funding Ratio requirement (akin to the NSFR) of 75%. However, most banks are well in excess of the required minimum and Tier 1 capital also counts towards the numerator of the ratio.

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