RESERVE BANK
OF NEW ZEALAND
TE PŪTEA MATUA

Response to submissions on the Consultation Paper: Serviceability Restrictions as a Potential Macroprudential Tool in New Zealand

November 2017

1. The Reserve Bank undertook a public consultation process from June – August 2017 on the possibility of adding serviceability restrictions to the toolkit described in the Memorandum of Understanding on Macroprudential policy (MoU).[1] The Reserve Bank received 25 submissions. A majority of submissions that expressed a clear view were against serviceability restrictions being added to the Reserve Bank's toolkit. On the other hand, there were supportive submissions, and some submissions which went further and suggested serviceability instruments such as a debt-to-income ratio (DTI) restriction should be immediately deployed (not just added to the macroprudential toolkit set out in the MoU as the Reserve Bank had proposed). Submissions on both sides provided concrete and detailed suggestions, and the Reserve Bank would like to thank all submitters.

2. The submissions are published on the Reserve Bank's website following any redactions requested by submitters (e.g. to anonymise any personal information). Rather than fully summarising all submissions, this paper seeks to highlight some key points, particularly those made by multiple submitters, respond to some of these points, and highlight potential next steps that the Reserve Bank will continue to discuss with Treasury and the Minister of Finance.

The current environment

3. Many submissions stated that loan-to-value ratio (LVR) restrictions are currently having a significant effect on the housing market and mortgage lending. Others said with mortgage rates rising recently and the housing market softening, DTI restrictions are not needed now.

4. Submitters expressed a range of views on whether house prices are currently overvalued. Some submissions stated that supply is the best way to correct imbalances and that LVR or serviceability restrictions cannot permanently solve housing market imbalances.

5. A number of submissions noted that banks' own serviceability policies have tightened recently. Some noted that New Zealand consumer law (Credit Contracts and Consumer Finance Act 2003 (CCFA) and the related Responsible Lending Code (RLC)) requires lenders to undertake serviceability assessments. Some banks with Australian parents submitted that they are subject to the Australian Prudential Regulation Authority's (APRA) prudential practice guide on residential mortgage lending, APG 223.[2] Both the RLC and APG 223 require lenders to take the risk of rising interest rates into account when deciding if lending will be affordable.

Reserve Bank Response

6. Most of these points were consistent with the Reserve Bank's views in the consultation paper. In particular, the Reserve Bank does not believe DTI restrictions should be deployed in the current housing market environment, and considers that the key longer term solution to housing market imbalances is to facilitate growth in housing supply in areas that need it.

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[1] Memorandum of Understanding on Macro-prudential Policy.

[2] Strictly speaking, APG 223 is motivated as a guide to prudent lending practices in residential mortgage lending in Australia, but APRA has also stated that "the guidance constitutes APRA's view of sound practices that should have relevance across the entirety of an [Authorised Deposit-Taking Institution's] operations". The Reserve Bank understands that lending policies at parent banks reflecting the APG 223 guidance are, to varying extents, also implemented by New Zealand subsidiaries.

7. We also acknowledged in the consultation paper that banks already undertake serviceability assessments and allow for the risk of rising interest rates. However, the Reserve Bank remains of the view that individual bank lending decisions may fail to take account of their impact on systemic risk during periods of intense competition for mortgage loans, and that there can be a role for limits on banks' serviceability practices during these periods.

DTIs and alternatives

8. A number of submitters stated that the LVR policy has been effective in reducing mortgage related risk on banks' balance sheets, and has also been a factor in the current stabilisation of the housing market. Several submissions suggested LVRs are a sufficient policy to enforce sound mortgage lending standards.

9. Submitters that were against DTI restrictions frequently suggested that DTIs are a fairly crude measure of risk. For example, some borrowers will likely be able to cope with a DTI of 6 (e.g. they have no dependents and a high and potentially rising income). Others would not be able to cope with a DTI of 5. There were particular concerns expressed around the relationship between DTI and risk for investors; this is discussed in a later section of this paper.

10. Some submitters suggested that a tool which set a 'hurdle' interest rate used in banks' serviceability calculations would be a better serviceability restriction. Some also noted that debt service ratio restrictions (DSRs) are quite common internationally and suggested they were potentially better than DTIs. There were also some comments about other specific servicing policies that could be considered (for example restricting the use of foreign income or interest only lending).

11. A few submitters suggested that increasing minimum bank capital requirements would be a good alternative to DTIs, and/or that monetary policy could respond more to the housing market than is currently the case.

12. Two submissions pointed out that temporary DTIs are unusual: policies using such instruments (or similar tools) tend to be permanent in other countries.

Reserve Bank Response

13. The Reserve Bank accepts that DTI is not a perfect indicator of risk. The attraction of DTI is that it is easy to compute and understand, and should be fairly well correlated with affordability. However, the Reserve Bank agrees that if serviceability restrictions were added to the MOU, this should be written in a more general way that would also allow a DSR or other related restriction to be deployed if supported by subsequent analysis.

14. While DSRs are indeed fairly common internationally, they are often used alongside a minimum assumption about mortgage interest expenses. This effectively means the policy implies a maximum DTI, even if the policy is expressed as a DSR.

15. A minimum 'hurdle' interest rate is another form of serviceability restriction, although it is not a completely specified one (since it leaves some parts of the lending decision, such as estimating living expenses, at the lenders' discretion). It is possible for overall serviceability standards to be very loose while maintaining a conservative assumption on the hurdle interest rate.

16. For this reason, a minimum hurdle rate may need to be combined with additional monitoring (and potentially rules) around other aspects of the serviceability calculation. For example, something like APRA's APG 223 could be considered in the New Zealand context. However, the Reserve Bank's regulatory approach has historically sought to avoid providing this level of prescriptive guidance about loan origination. This partly reflects a view that lenders are better placed to decide the details of their loan origination policies than the regulator, as well as the need for additional monitoring and supervision that such a guide might create.[3]

17. The Reserve Bank is currently reviewing the capital adequacy framework for locally incorporated banks. As described in the consultation paper, capital can ensure banks remain solvent, but doesn't necessarily prevent large numbers of borrowers becoming distressed in a downturn, which in turn may worsen the economic situation and the health of the financial system. Housing is sufficiently crucial to the economy, and as a source of collateral for the financial system, that the Reserve Bank considers the resulting efficiency costs and instability arising from a rapid fall in house prices can be considerable (as discussed in the cost benefit analysis). The Reserve Bank considers that serviceability and LVR restrictions are more effective in protecting against these concerns, and this likely explains why they have been deployed in a significant number of countries since the GFC.

18. We agree that temporary DTIs would be unusual. The MoU is currently drafted as a framework for tools being applied cyclically, allowing banks to make their own mortgage origination decisions in times where that does not appear to be creating financial stability risks. However, the idea that macroprudential tools should only be used cyclically could be re-examined when the MoU is reviewed (this is to occur at a time after it has been in use for 5 years, i.e. after May 2018).

Policy details: Investors

19. Several submissions noted DTI and similar policies are not commonly used for investors overseas.

20. Submitters noted that (given fairly low rental yields) a large investor with quite a low LVR (say 40%) would likely be a high DTI borrower and thus subject to the DTI speed limit example described in the consultation paper. Some submitters suggested the risk reduction achieved by reducing lending to these borrowers would be quite limited.

21. Some submitters suggested the example policy calibration described in the consultation paper would have the effect of reducing the rental property stock (either through inhibiting construction, or through causing homes to be bought by owner-occupiers instead of investors). One commenter suggested this would increase the housing shortage, because rental properties tended to be more intensively occupied than owner-occupied properties.

Reserve Bank Response

22. The Reserve Bank has considered the feedback on DTIs for investors in some detail. The Reserve Bank acknowledges that recent DTIs such as those implemented in Ireland and the UK were not applied to investors. However, other serviceability policies (such as DSR restrictions) are applied to investors in countries such as Canada, Hong Kong and Singapore.

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[3] See also Fiennes, T (2016), New Zealand's evolving approach to prudential supervision.

23. Recent UK policy developments are of some further interest. While the DTI does not apply to UK investors, the Bank of England has suggested that a macroprudential "interest coverage ratio" could be applied to investor lending in the UK in the future.[4] This would limit the debt on rental properties to a level where (even at a stressed interest rate) the investor could comfortably service the debt with rental income from those properties. Moreover, while (as one submitter noted) current UK prudential policy does allow labour income to be counted in the serviceability assessment for an investor, an analysis of several major UK bank websites suggests that these lenders generally require rental income to comfortably cover interest expense.

24. Analysis of rental income scenarios suggests that it may be difficult to calibrate a DTI limit that appropriately restricts DTIs for owner-occupiers without being overly restrictive for investors. For example, an investor could have a DTI of 5 assuming a 4% net rental yield, an LVR of just 20%, and no other income servicing their loan. Even if that investor lost rental income for a long period, it seems likely they would be able to get further finance (e.g. push the LVR up to 25%) to cover interest payments in that period, so they do not appear high risk.

25. Furthermore, the Reserve Bank's current LVR restrictions on investment property already effectively limit debt on rental properties (unless they have a very low yield) to a level where the rental property income should cover the debt servicing. For example, using a stressed servicing rate of 7.5% and assuming a property yield of 4.5%, a rule that required debt to be limited to that serviceable with rental income would effectively limit the investor's LVR to 60%.

26. Based on the feedback received, the Reserve Bank will consider alternatives to the hypothetical calibration example provided in the consultation paper if a serviceability limit is used in the future. These alternatives could include a DTI limit that distinguishes more between investors and owner-occupiers, or serviceability limits that focus on owner-occupiers and investors separately.

27. The Reserve Bank agrees that the hypothetical DTI limit suggested in the consultation paper would, at the margin, tend to boost the home ownership rate and thus reduce the share of the housing stock in the private rental market. The consultation paper proposed to exempt lending for new construction (as with LVRs), meaning a serviceability restriction would be unlikely to reduce demand for new builds (if anything, the opposite seems likely).

Policy details: Administration Exemptions and Speed limits

28. Several submitters suggested that in order to apply DTI restrictions in an equitable manner across lenders it would be necessary to tightly harmonise definitions, such as those covering what is permitted to count as income, and the specific haircuts that would apply. Concerns were raised around more complex customer scenarios (e.g. where a home loan was combined with a business loan, or guarantees were issued by one family member in favour of another). Some submitters raised the idea of shared data services that would allow banks to gather information about customer income and/or debts at other banks more easily than at present. One submitter suggested that collecting data on the DTI ratios of borrowers was onerous and should not be undertaken unless a serviceability limit was in place. Another

[4] http://www.bankofengland.co.uk/financialstability/Documents/fpc/draftpolicystatement181116.pdf

suggested some specific points around data definitions and standards for the Reserve Bank's DTI survey.

29. Most commenters supported a speed limit approach to any restriction, as well as retaining the existing set of exemptions that apply in the LVR policy. There was some support for the construction exemption, while others suggested it sends the wrong message since construction lending is inherently more risky. One submitter made a similar point about the low value owner-occupier exemption suggested in the consultation paper.

30. Some submitters suggested (partly in light of the data complexities discussed above) that further exemptions would be required for lending involving small businesses or guarantees.

31. Some banks suggested the administrative and training costs associated with implementing a serviceability policy would be significant, although these costs were not quantified.

Reserve Bank Response

32. The Reserve Bank acknowledges that there is a trade-off between tightly harmonised definitions (which would involve the Reserve Bank writing detailed rules about exactly how to calculate recognised income, for example) and a policy which relies on banks' own internal policies (which could result in some differences in the treatment of borrowers across banks' under any DTI limit). For now, the Reserve Bank believes that it would be more appropriate to base any DTI rule on the income banks consider prudent to count when doing serviceability assessments, rather than writing a 'rulebook' specifying exactly what is permissible to count. The Reserve Bank currently collects data on this basis, and expects to continue to do so, but will engage further with banks on the definitional points raised. The Reserve Bank acknowledges that building systems to provide DTI data has involved some set-up costs, and thanks banks for their work to date. The Reserve Bank believes that this data is valuable for monitoring systemic risk even in the absence of an actual serviceability restriction.

33. Exemptions (e.g. for new construction) are designed to avoid constraining certain types of lending with any serviceability restriction. Importantly, they do not require banks to offer the lending that is exempted from the restrictions. For example, if it is not in a particular bank's risk tolerance to provide construction lending at high DTIs, they are under no obligation to do so. Further exemptions could be considered, and the speed limit would also allow banks to grant loans in other special cases.

Cost benefit analysis and empirical studies of DTI as a risk factor

34. Few submitters directly addressed the cost benefit analysis, other than to suggest that the costs were not dramatically lower than the benefits and/or that the costs could be higher than suggested. The most detailed response on the cost benefit analysis provided an alternative assessment and suggested the risk reduction benefits of the policy would be much smaller (approx. 20% of what was suggested), thereby making the net benefits of the proposed policy negative.

35. One submitter noted that the most severe housing crises worldwide have tended to occur in countries that do not have a freely floating exchange rate, which can act as a shock absorber in a domestic crisis, given that household debt is denominated in

local currency. Several also pointed out the severe decline in origination standards that preceded some international crises and suggested that, given this has not occurred in New Zealand, the international evidence is not indicative of risks to the New Zealand financial system.

36. One commenter provided some detailed comments on the relationship between DTIs and default rates. The consultation paper focused on the Irish experience, noting that for second and subsequent buyers, there was a relationship between debt to income and default rates. The submitter noted that *after controlling for origination vintage*, this relationship was apparent for DTIs up to 3.5, but default rates levelled off after that. The submitter found evidence from two other markets and concluded overall that there was “no material” relationship between DTI and default rates.

Reserve Bank Response

37. The cost benefit analysis in the consultation paper was intended to be indicative, and showed that there are potential net benefits to a serviceability policy in some circumstances. A more precise cost benefit analysis would need to be conducted before an actual tool was deployed, as stated in the consultation paper. The Reserve Bank accepts that some elements of the calculation are uncertain, and that reasonable people can disagree with the precise calibration.

38. Depending on the circumstances in which a tool was being introduced, the Reserve Bank agrees that it may be that a different calibration of the tool would have significantly different net benefits than the one provided as an example. For example, as discussed above, a tool that treated investors differently to owner-occupiers may be preferable.

39. The Reserve Bank agrees that New Zealand’s historical experience suggests that losses on mortgage lending alone would be unlikely to lead to a financial crisis.[5] However, this is an inference from the historical record where (on average) residential mortgage debt was much smaller relative to GDP and household income than it is today; it does not preclude a severe housing crisis happening in the future. The US experience in the Global Financial Crisis, for example, was a severe housing downturn despite the exchange rate being available to act as a shock absorber. Moreover, many of the bank losses in a financial crisis caused by a housing crisis would not necessarily be on mortgages – for example declining consumption could lead to business failure and a very weak commercial property market. But a DTI policy (by reducing the weakness of consumer spending) would also help to mitigate these risks.

40. The Reserve Bank agrees that there is limited evidence on the relationship between default rates and DTIs (or related variables like DSR) in severe downturns, partly reflecting the limited number of panel datasets of mortgage borrowers in a severe downturn. However, the Irish evidence does show a significant increase in default rates as DTI rises, outside of first home buyers (as noted in our consultation paper). Some econometric analysis of US mortgages also appears to show defaults rising as DSRs rise, controlling for other factors.[6] The Reserve Bank notes that this particular exercise was conducted with data that has only been publically available for a couple

[5] This is especially true in countries with freely floating exchange rates, and with borrowers borrowing in local currency, as in New Zealand. However, the shock absorbing role of a freely floating currency would be limited during a global economic downturn.
[6] http://toddwschneider.com/posts/mortgages-are-about-math-open-source-loan-level-analysis-of-fannie-and-freddie/

of years, and will watch for more studies using that dataset in the future. For now, the Reserve Bank agrees it appears, as some submitters noted, that DTI was not as strong a driver of default as other characteristics like LVR in most of the existing empirical studies.

Summary of ways forward

41. The Reserve Bank thanks all submitters for their feedback, which has been valuable. Given the current slowdown in the housing market, the Reserve Bank considers a serviceability restriction would not be appropriate at present, but could still have a role to play in the future.

42. If the MOU is amended to incorporate serviceability restrictions, the Reserve Bank considers that this should be written in such a way as to admit a range of possible formulations.

43. The Reserve Bank expects to discuss the results of this consultation with the Minister of Finance in due course. The Reserve Bank will also be discussing the Terms of Reference for the 2018 review of the MoU with the Minister and Treasury. The Reserve Bank considers that the potential future use of serviceability restrictions could be reconsidered as part of that wider review.

44. In the meantime, the Reserve Bank will continue to work with banks to improve the data being received on DTIs. The Reserve Bank is aware that system issues mean data from some banks includes overstated DTI ratios for some customers, and would like this to be gradually improved. The Reserve Bank may also provide further guidance around technical areas such as treatment of guarantees.