NEW ZEALAND
BANKERS ASSOCIATION

Submission

to the

Reserve Bank of New Zealand

on the

Consultation Paper – Serviceability Restrictions as a Potential Macro-prudential Tool in New Zealand

25 August 2017

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About NZBA

1. NZBA works on behalf of the New Zealand banking industry in conjunction with its member banks. NZBA develops and promotes policy outcomes that contribute to a strong and stable banking system that benefits New Zealanders and the New Zealand economy.

2. The following sixteen registered banks in New Zealand are members of NZBA:
   - ANZ Bank New Zealand Limited
   - ASB Bank Limited
   - Bank of China (NZ) Limited
   - Bank of New Zealand
   - Bank of Tokyo-Mitsubishi, UFJ
   - Citibank, N.A.
   - The Co-operative Bank Limited
   - Heartland Bank Limited
   - The Hongkong and Shanghai Banking Corporation Limited
   - Industrial and Commercial Bank of China (New Zealand) Limited
   - JPMorgan Chase Bank, N.A.
   - Kiwibank Limited
   - Rabobank New Zealand Limited
   - SBS Bank
   - TSB Bank Limited
   - Westpac New Zealand Limited.

Background

3. NZBA welcomes the opportunity to provide feedback to the Reserve Bank of New Zealand (**RBNZ**) on the Consultation Paper – Serviceability Restrictions as a Potential Macroprudential Tool in New Zealand (**Consultation Paper**) and commends the work that has gone into developing the Consultation Paper.

4. If you would like to discuss any aspect of the submission further, please contact:

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Introduction

5. The Consultation Paper does not in our view establish that the benefits of a debt-to-income ratio (**DTI**) outweigh its costs. More analysis is required before the merits (if any) of introducing a DTI macroprudential tool to prevent a systemic collapse in the housing market can be properly assessed.

6. NZBA considers that DTIs may create a number of unintended consequences for the housing market and the economy, and that there are sufficient serviceability rules

and processes already in place to assess affordability and respond to market conditions.

Question One

7. RBNZ has relied on empirical evidence of severe housing market downturns in support of its view that DTIs and loan-to-value ratios (**LVRs**) are important determinants of risk of loan default.

8. In his paper *The debt to income ratio as a prudential tool: Response to the Reserve Bank of New Zealand Consultation Paper* (August 2017), Ian Harrison, Principal, Tailrisk Economics, undertook an analysis of the evidence relied on by RBNZ, concluding:

> *The conclusion from our assessment of the [RBNZ's], and other evidence, of the relationship between DTIs and risk, is that it is clear that there is no material evidence that higher DTI loans are riskier.*

NZBA agrees with that conclusion; the evidence linking high-DTI loans and default is weak.

9. Rather, as noted in an article cited by RBNZ, Gerardi et al (2015), job loss has the most significant impact on the likelihood of default. The reason is that loss of income causes the debt servicing to income ratio to rise above 100%. That occurs regardless of what the DTI was at the loan origination (note that DTI at origination has no correlation with the likelihood of job loss).

10. NZBA also notes that RBNZ's assessment of current DTI levels in New Zealand is, by its own account, based on preliminary domestic data only. On the basis of that (preliminary) data, RBNZ queries why DTIs achievable in New Zealand are higher than those seen internationally. We consider those differences are reflective of the lack of comparability of DTI frameworks, environmental influences, and individual countries' tax treatment of property as a savings vehicle. Additionally, we note that we are not aware of international data on DTIs for new loans, but DTIs for existing loans show a substantial divergence across countries. These differences persist for decades, which suggests there is a similar divergence in DTIs for new loans that is attributable to structure (source: OECD, RBNZ). Finally, there is no correlation between the level of a country's average DTI and the depth of its downturn during the GFC.

11. NZBA also does not consider that RBNZ's rationale for introducing a DTI is assisted by the evidence that DTIs (and similar tools) are becoming more common internationally. That is because the DTI restriction proposed by RBNZ in the Consultation Paper is fundamentally different from the tools in use elsewhere, and therefore incomparable:

    a) **United Kingdom:** the United Kingdom uses a loan-to-income (**LTI**) approach, rather than a total debt to total gross income approach. This means that only the borrowing associated with a specific mortgage is taken into account for the calculation, as opposed to total customer debt (eg credit card debt, vehicle loans, personal loans, store cards, hire purchases, etc).

Additionally, the Bank of England Prudential Regulation Authority excludes buy-to-let (residential investment) mortgages from its LTI restrictions.

b) **Ireland:** the introduction of LTI restrictions in Ireland was in significantly different circumstances to those in New Zealand; the LTI was introduced as part of the broader political response to the housing market crash and it was therefore possible to purchase a house with a low LTI limit.

Similar to the United Kingdom, in Ireland buy-to-let mortgages are excluded from LTI restrictions. The Central Bank of Ireland has stated: “Buy to let mortgages are not covered by the Regulations as the LTI ratio is a less relevant metric for this type of lending.”[1] Instead, it targets investors via a lower LVR limit (as does the RBNZ).

12. Notably, the DTI proposed by RBNZ is more restrictive than the LTI equivalent operating in the United Kingdom and Ireland.

Further comments on the Irish evidence

13. The evidence from Ireland cited in the Consultation Paper is not useful for answering the question of whether high DTI borrowers are more susceptible to mortgage default and consumption stress. Here we reproduce the loan default heat maps from Hallissey, Kelly & O'Malley (2014).

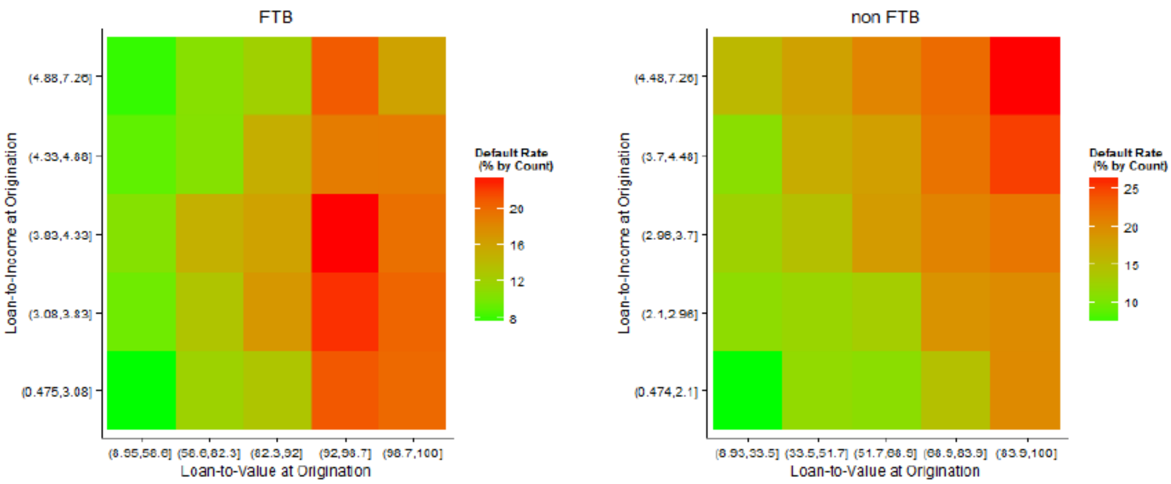

Figure 4: Heatmap of Default by Originating LTV and LTI

(FTB: first time buyer, non FTB: non first time buyer)

14. Several drawbacks are apparent. First, these heat maps show that the Irish crisis was a catastrophic failure of lending standards, where the degrees of failure are almost irrelevant. Even the lowest-risk groups had default rates of 8% or more. Also note that residential mortgages only cover part of the story – Irish banks suffered similar-sized losses on lending to property developers (Report of the Joint Committee of Inquiry into the Banking Crisis, January 2016). Limits on LVRs or DTIs would not have saved the Irish banks from insolvency.

[1] Central Bank of Ireland: *FAQ – New regulations on residential mortgage lending.* (https://www.centralbank.ie/docs/default-source/news-and-media/press-releases/faq---new-regulations-on-residential-mortgage-lending.pdf?sfvrsn=2)

15. Second, the heat maps do not show what proportion of borrowers fall into each segment of the heat map. This is particularly important in the New Zealand case as the existing LVR regulations have already removed much of the right-hand side of the horizontal axis of these heat maps. Therefore, the key question is whether low LVR, high DTI borrowers (ie the top left-hand side of the heat map) are not only risky enough but numerous enough to have a systemic impact. This is an empirical question, for which we have not seen any New Zealand evidence presented.

16. Third, there is a selection bias inherent in these kinds of studies. The second heat map appears to show a consistent relationship between DTI and default rates for non-first home buyers. However, the first heat map implies that for first-time buyers, high DTI borrowers are the least risky. That might seem to cast doubt on whether the relationship observed in the second heat map is robust, or just a statistical artefact.

17. We can only observe default rates for borrowers that had already passed through the banks' loan approval processes. It may be, for instance, that Irish banks were very selective about making high DTI loans to first-time buyers, so that those who qualified were among the higher-quality borrowers when the crisis hit. The heat maps cannot distinguish between whether certain types of loan were inherently riskier, or whether there were biases in the Irish banks' lending standards. Further, even if there are such biases in New Zealand banks' lending standards, there is no reason to think that Irish data can tell us anything about these.

Comments on the US evidence

18. The RBNZ also cites evidence that "US households in the GFC with higher-LVR mortgages reduced their spending by more than the less indebted households", and that "even without substantial mortgage defaults, negative equity can prevent homeowners from shifting for a better job". NZBA considers that these are arguments for LVR limits, not DTI limits.

Question Two

19. NZBA does not agree that rising interest rates would put borrowers under pressure as a result of current levels of debt relative to income. NZBA considers that current lending affordability is responsibly assessed by banks and allows for foreseen and unforeseen events that can impact future affordability (eg interest rate increases).

20. In its Consultation Paper, RBNZ states that "serviceability assessments being imposed by banks may not always be sufficiently strict, especially when interest rates are very low", and that serviceability is essentially "unconstrained". NZBA does not agree. When undertaking the loan approval process, banks use their own financial assessment methodology to determine borrower affordability. These models have been robustly tested and refined over a significant period of time and take into account the effect of an increase in interest rates on a borrower's ability to repay the loan.

21. Additionally, there are a number of significant statutory and regulatory limits operating on banks:

    a) LVRs: imposing DTIs on top of the existing LVR limits is unnecessary as both tools act in a similar way; they operate to limit borrowing.

b) Responsible Lending Code (**RLC**): states that lenders should account for the risk of rising interest rates.
c) Credit Contracts and Consumer Finance Act 2003 (**CCCFA**): the CCCFA is an important legislative control on lenders. The CCCFA requires that credit providers make reasonable enquiries so as to be satisfied that borrowers can make repayments without suffering significant hardship, and that the credit provided is likely to meet the consumer's needs and objectives. Further guidance on how to comply with lender responsibility principles can be found in the RLC.
d) New Zealand Code of Banking Practice: banks voluntarily adhere to the Code of Banking Practice, which contains principles relating to responsible lending.
e) Australian Prudential Regulation Authority (**APRA**) Prudential Practice Guide on Residential Mortgage Lending (**APG 223**): Australian owned New Zealand banks are also subject to APG 223. APG 223 sets out APRA's expectations for prudent residential mortgage lending practices, including guidance on addressing credit risk within a bank's risk management framework, applying sound loan origination criteria, and appropriate security valuation methods. APG 223 also states that lenders should account for the risk of rising interest rates.

22. Accordingly, NZBA does not consider that DTI limits would be likely to improve upon banks' existing lending practices, and the existing body of legislation and regulation, in the event of an interest rate rise.

Question Three

23. As discussed above, NZBA considers that the statutory and regulatory limits currently in place are sufficient to mitigate the risk of unforeseen events that may impact on affordability. However, if RBNZ considers the introduction of a serviceability restriction a necessity, one possible alternative to a DTI is a serviceability interest rate (**SIR**). NZBA accepts that a SIR would not be without challenges – it would also require consultation and calibration – however, as is discussed below, it would have advantages over a DTI.

24. The SIR is based on a notional interest rate that is set above current market rates to incorporate a level of interest rate sensitivity. This mechanism assesses the customer's ability to repay debt within a reasonable expectation of possible increased interest rates or other plausible change of circumstances.

25. A SIR could involve an industry level sensitised (notional) interest rate defined by RBNZ for residential mortgages and which could be adjusted based on the economic outlook. All banks would apply this rate to their affordability assessment calculation as a minimum affordability measure.

26. A SIR can be imposed using a prudential guide approach, which NZBA suggests is more suitable for New Zealand banks than a prescriptive approach, as it is a better fit with RBNZ's self-discipline and market discipline philosophy. This approach would support both industry consistency, and RBNZ's objective to prevent the shock of high interest rates driving defaults.

27. NZBA considers that a SIR would have advantages over a DTI framework:

- It is better able to respond to a rapidly changing market environment as it can be adjusted quickly and easily.
- Banks will be able retain their current serviceability assessment frameworks.

- It would enable a consistent approach for both owner-occupiers and residential property investors.
- It would alleviate some of the more problematic design issues with DTIs as outlined at Question Four.

Question Four

28. NZBA considers that DTI restrictions would be likely to give rise to practical challenges such as those outlined below.

DTIs do not take into account individual borrower characteristics

29. NZBA considers that DTIs are not an accurate measure of affordability as they do not take into account individual borrower characteristics, for example, after-tax income, household costs, and other outgoings. That can be illustrated by way of two examples:

    a) Customer A is a single person with no dependents, a car, and a gross income of $100k per annum, who would like to borrow $600k. Debt is 6 times gross income, resulting in a DTI of 6. Under a DTI restriction measure of 5 Customer A would be outside regulatory debt servicing guidelines. Customer A may have no other financial commitments and could comfortably service a $600k debt, including room to accommodate interest rate increases. Even though Customer A may be able to service the borrowing, they may be unable to obtain a home mortgage loan from a bank due to the bank having already reached its limit of high DTI borrowing for that period (the ‘speed limit’).

    b) Customer B is a married couple with 3 children, a car, and a combined gross income of $100k per annum, who would like to borrow $490k. Debt is 4.9 times gross income, resulting in a DTI of 4.9. Under a DTI restriction measure of 5, Customer B would be within regulatory debt-servicing guidelines. Customer B has additional household expenses related to 3 dependents which, in practical terms, could mean they cannot actually afford to service $490k. Even though Customer B meets the regulatory DTI criteria, the actual debt servicing ability could be marginal or even negative, and a home mortgage loan may be declined under the banks’ current internal serviceability assessment.

30. As illustrated, a DTI cannot distinguish between these two scenarios, despite the fact that Customer A and Customer B’s ability to service their debt in the event of an increase in interest rates is vastly different. A macro prudential tool that cannot take into account various household scenarios is susceptible to arbitrary and unprincipled consequences, for example, as described above.

DTIs only reflect a snap-shot in time

31. NZBA notes that the DTI for a particular borrower is only captured at application and can change dramatically over a short period of time for certain demographics.

32. DTIs tend to structurally disadvantage younger borrowers, as the point-in-time nature of the assessment cannot take into account the reasonable likelihood of income

growth over the life of the mortgage. The effect has been recognised by other regulators:[2]

> *For example, young households in general have lower salaries at the beginning of their professional lives, but often very good salary potential. By applying a debt-to-income limit, the banks' possibilities of assessing the households' potential payment capacity disappear to some extent since it is current income that forms the basis for the credit assessment even though a mortgage has a term of many years. A debt-to-income limit can thus make it difficult for young households with good creditworthiness to enter the housing market*.

Definition of 'income' is unclear

33. There may be some difficulties achieving a consistent definition of 'income' across the industry, for example:

- what qualifies as income;
- how to treat residential property investor income;
- how to measure income for self-employed customers; and
- how to deal with businesses that use home lending as a source of capital.

34. Additionally, the industry would benefit from guidance on how DTIs would apply to borrowing in the following situations:

- where the loan has been guaranteed by another person/entity (eg where first home buyers are relying on guarantees from a family member);
- in the trust context; and
- in the context of complex ownership structures (eg where multiple borrowers own the property, or risk being locked out of the property market).

Unintended consequences for the housing market

35. Home buying behaviour driven by DTI exemptions could mean an increased demand for the lower-priced homes, and increased demand for new builds. Additionally, DTI restrictions may soften the demand for higher value properties, but the demand for lower-priced homes could increase and may generate a surge in the values of this sector of the market.

Question Five

36. NZBA broadly agrees with the speed limit approach to serviceability, however, we wish to also note the complexities associated with applying a combined LVR and DTI speed limit framework.

37. Additionally, NZBA notes that the proposed DTI would apply to both investors and owner-occupiers, however, income and expense streams are entirely different for

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[2] Gustav Alfelt, Björn Lagerwall and Dilan Ölcer, Sveriges Riksbank "An analysis of the debt-to-income limit as a policy measure" (2015) at pg 2.

(http://www.riksbank.se/Documents/Rapporter/Ekonomiska_kommentarer/2015/rap_ek_kom_nr8_150602_eng.pdf) these groups. Accordingly, NZBA queries whether it is practical to apply one DTI to both.

38. If a DTI is introduced, NZBA recommends that RBNZ should consider the following exemptions to the restrictions (additional to the construction and inexpensive owner-occupied homes exemptions):

- residential investment lending;
- business lending that uses the business owner's home as security;
- bridging loans;
- refinancing;
- first home buyers; and
- holiday homes (particularly if owned by several unrelated parties).

39. Given the broad range of exemptions that would be necessary and the complexities associated with implementing those carve-outs, NZBA queries whether DTIs are a workable and useful tool.

Question Six

40. As discussed at Question Four, NZBA considers that DTIs may have unintended consequences for the housing market.

Question Seven

41. The Consultation Paper does not establish that DTI restrictions create any additional benefits over and above existing regulation and processes.

42. In particular, the Consultation Paper does not clearly establish that there is a net benefit from DTIs in addition to existing prudential regulation, such as LVRs and banks' existing serviceability criteria. The arguments in the Consultation Paper largely revolve around the benefits on lending restrictions in general, while considering only the additional costs of DTIs. It appears that it may be implicitly double-counting the benefits of LVR limits.

43. The following table shows that most of the estimated benefits of DTIs come from reducing the likelihood and severity of housing crises, rather than crises that threaten the banking/financial system. Only the latter is within RBNZ's mandate (being to ensure the soundness and efficiency of the financial system).

	Risk of housing crisis	Of which financial crisis	Cost of housing crisis	Cost of financial crisis	Cost of housing crisis (% GDP)	Additional cost if financial crisis (% GDP)
Baseline	5%	1.5%	10%	20%	0.50%	0.15%
With DTI	4%	1%	8%	16%	0.32%	0.08%
Reduction in costs					0.18%	0.07%

44. Macroeconomic stabilisation may be a useful secondary goal, as acknowledged in the Memorandum of Understanding. But it does not follow that macroprudential policy is the best way to achieve this, or that DTIs are the right tool for it. NZBA questions whether inflation targeting, for instance, would stand up to a similar cost-benefit analysis – a case could be made that New Zealanders would value greater

stability in the housing market or in the macroeconomic cycle, at the expense of somewhat more variability in inflation.

45. The Consultation Paper also appears to overestimate the cyclical aspects of DTIs (and macroprudential policy in general). The overseas experience has been that these limits have been permanent rather than cyclical. It is also doubtful that the 'release' phase of DTIs would work as described. The DTI restriction can be eased during a downturn, but it does not follow that banks would lend at higher DTIs.

46. We suggest that the RBNZ should reconsider its cost-benefit analysis under the more realistic assumption of permanent DTI restrictions. This would mean both lower benefits (the frequency of crises over the long term is much less than 5%) and higher costs (longer-lasting restriction on activity, greater chance of disintermediation).