RESERVE BANK
OF NEW ZEALAND
TE PŪTEA MATUA

Regulatory impact assessment on the asset class treatment of residential property investment loans

May 2015

Agency disclosure statement

1. This Regulatory Impact Statement (RIS) has been prepared by the Reserve Bank of New Zealand. It provides analysis on possible changes to the capital adequacy treatment of residential mortgage loans to property investors.

2. Between September 2013 and April 2015, the Reserve Bank consulted three times on proposals for grouping loans to residential property investors in a new, separate asset class. In addition to these public consutlations, the Reserve Bank has also held meetings with relevant stakeholders and their representative groups. Partly as a result of the consultation feedback received, the Reserve Bank's initial policy proposals have been amended substantially on a number of key aspects throughout this process. This RIS takes account of the consultation feedback received by the Reserve Bank.

3. The analysis presented in this RIS has informed the policy decision as published by the Reserve Bank on 29 May 2015.

Problem definition

4. Capital adequacy requirements for banks in New Zealand are based on international recommendations as issued by the Basel Comittee on Banking Supervision (BCBS). The set of requirements the BCBS published in 2008 is commonly referred to as Basel II, while the updates made after the financial crisis have been named Basel III. The Basel II requirements divide loans into five main categories, called asset classes. These are retail, equity, bank, corporate and sovereign. This is done to group loans with broadly similar risk characteristics. In New Zealand, all retail mortgage loans are currently held in the residential mortgage loan asset class, itself a subset of the retail asset class. This means that loans to owner-occupiers as well as loans to customers owning several properties are held in the same asset class.

5. Within Basel II, there are two capital adequacy approaches. The simpler, or less risk sensitive, approach is the Standardised Approach. Banks operating under this approach apply prescribed risk weights with only limited differentiation within an asset class. The alternative approach requires explicit regulatory approval because it allows banks to calculate the parameters of their capital adequacy calculation. That approach is called the Internal Models approach, or Internal Ratings-Based (IRB) approach.

6. The IRB approach recommends that residential mortgage loans to owner-occupiers are held in the retail asset class and that loans to property investors are held in a separate asset class:

   "Residential mortgage loans (including first and subsequent liens, term loans and revolving home equity lines of credit) are eligible for retail treatment regardless of exposure size so long as the credit is extended to an individual that is an owneroccupier of the property (with the understanding that supervisors exercise reasonable flexibility regarding buildings containing only a few rental units — otherwise they are treated as corporate). Loans secured by a single or small number of condominium or co-operative residential housing units in a single building or complex also fall within the scope of the residential mortgage category. National

supervisors may set limits on the maximum number of housing units per exposure."[1]

7. Although this aspect of the requirements is likely to be heavily influenced by the European and US housing landscape, where appartment-type rental accommodation is much more common than in New Zealand, the BCBS appears to expect that this recommendation is applied regardless of the type of non-owner-occupied accommodation. The most recent RCAP review of Australia's implementation of the Basel requirements crticised our neighbour, whose property market is probably the closest to ours, for grouping all mortgage loans in the same retail asset class:[2]

   "Under APRA's IRB Prudential Standards, mortgage loans are eligible for retail treatment regardless of the occupancy status of the property which, in the Assessment Team's opinion, is a deviation from the Basel Framework. (…) However, it is not certain what the performance of these [non-owner occupied mortgage] loans would be during a significant economic downturn, such as that experienced in Australia during the early 1990s, or whether the risk characteristics of such loans would remain similar to those of owner-occupied loans in such a circumstance. Accordingly the likely potential risk for capital understatement that could result from APRA's current treatment of non-owner occupied mortgages was considered material. On this basis, the RCAP team views this deviation as potentially material."

8. The requirement for internal models banks to group loans to property investors in a non-retail asset class, presumably the corporate asset class, although the Basel document is not explicit on this, stems from the understanding that those loans have a different risk profile from loans to owner-occupiers. This assessment has been validated by the experience of countries that went through a significant housing market crash during the global financial crisis. A study conducted by FitchRatings (2012) on Australian data also lends support to the view that property investment loans are a higher risk than loans to owner-occupiers.[3] Although circumstances and definitons may differ across countries and overseas experience may not always be directly applicable to New Zealand, in the absence of a domestic housing market downturn, that evidence can still provide a useful indication of what the risks are for residential property investment loans in New Zealand. Moreover, some of the incentives faced by investors in a downturn may be similar across countries.

9. In Ireland loans to residential property investors had significantly higher default rates than loans for owner-occupied properties (see Table 1 and Figure 1). A similar picture also emerged from the UK (see Figure 2), although it is noticeable that buy-to-let borrowers had lower arrears rates prior to the years associated with the global financial crisis.

[1] See section 231 of Basel II: International Convergence of Capital Measurements and Capital Standards: A Revised Framework – Comprehensive Version, 2006, available at http://www.bis.org/publ/bcbs128.htm

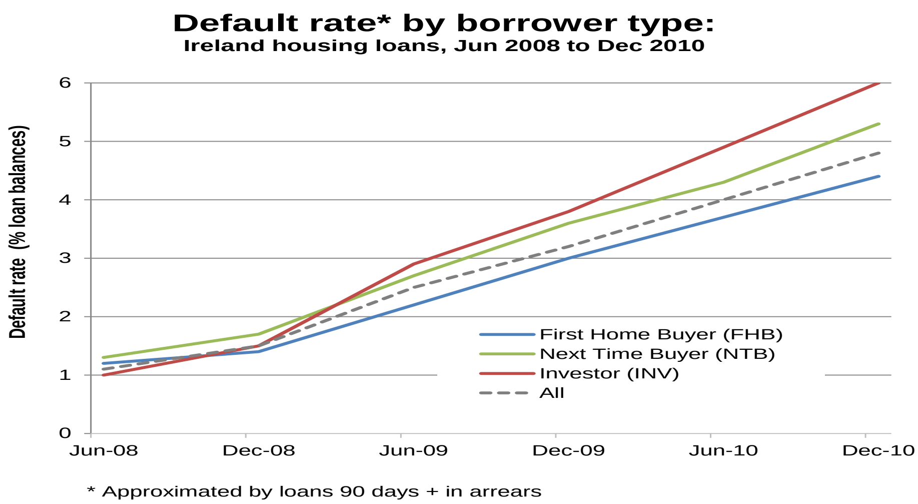
[2] See the 2014 RCAP document http://www.bis.org/bcbs/implementation/l2_au.pdf, p. 16.

Table 1: Ireland residential loans - realised loss estimates, 2011-2013

	Owner Occupier	Investor	Total
Central Bank of Ireland	5.9%	10.7%	7.0%
Financial Measures Programme (BlackRock Solutions)	7.6%	14.3%	9.2%

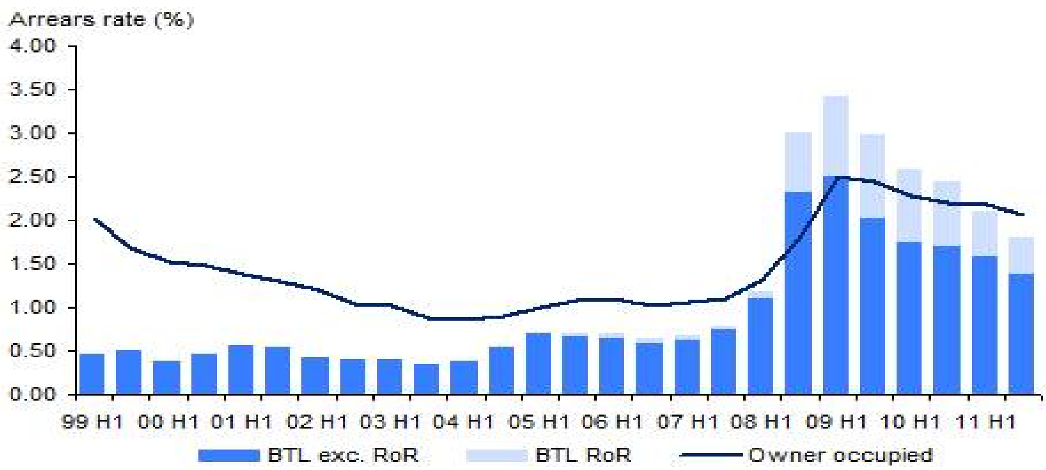
Source: "Stress" scenario in *The Good, The Bad and The Impaired: A Credit Risk Model of the Irish Mortgage Market*. Kelly, Central Bank of Ireland, November 2011, pg 25.

Figure 1



Source: *What Lies Beneath? Understanding Recent Trends in Irish Mortgage Arrears*. Lydon and McCarthy (2011). Central Bank of Ireland.

Figure 2



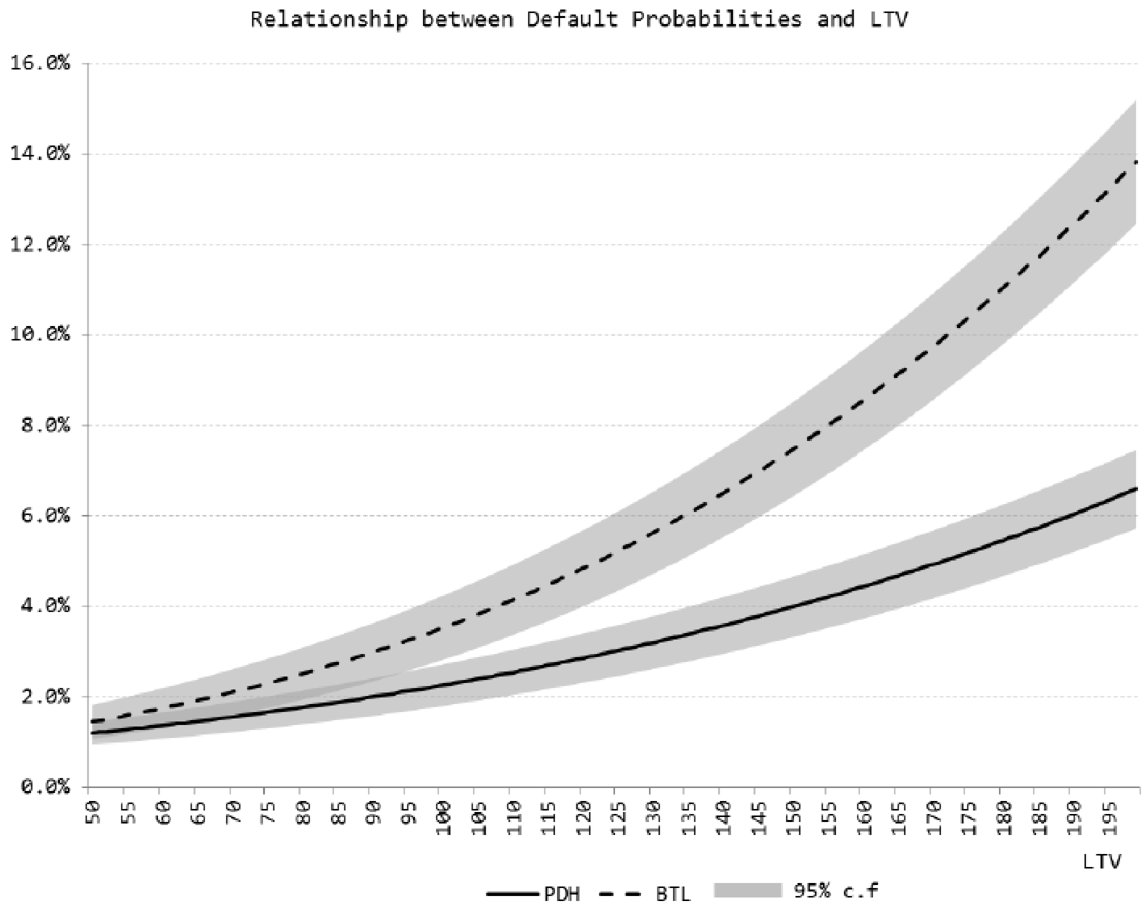
Source: UK Council of Mortgage Lenders

10. The lower arrears prior to the GFC could be interpreted as an indication of property investors' risk profile being more strongly correlated with systemic risk. That would

mean that a serious housing market downturn affects residential property investors more than owner-occupiers. This greater procylicality is also borne out by investors being disproportionately represented in borrower cohorts nearer to the peak of a housing cycle.

11. Furthermore, studies which have estimated default rates by LVR separately for investor loans and owner occupancy loans suggest that investor loans are substantially riskier at any given loan to value ratio. The figure below is from Kelly (2012) and shows an estimate of default rate based on current loan to value ratio. For example, if a loan was initially written at a 70 percent LVR and then prices fell 30 percent, the loan would appear in the chart below as LTV=100.[4] This would have a mildly increased estimated rate of default compared to a low LVR loan for an owner occupier. But for an investor, the estimated rate of default would be higher, and would have increased more sharply as a result of the decline in house prices. This may highlight differences in the likelihood of a strategic default between investors and owner-occupiers in the event of a downturn based on Irish data.

Figure 3



Note: To illustrate the relationship between default probabilities and current LTV, vintage is fixed to loan issued in 2006 and unemployment is fixed at the current national rate (14.1% as of December 2011).

Note: PDH is principal dwelling house, BTL is buy to let..

[4] Note that the loan to value ratio is abbreviated LVR in New Zealand and LTV in the UK.

12. In the US case, a New York Fed study (Haughwout et al, 2014) found that investors were an obvious driver of downturn defaults if they were identified as investors on the basis of being owners of multiple properties. The same effect was more difficult to establish if investors were identified using the borrower's declared intentions. Most studies of the US have data on declared intentions rather than actual occupancy status. Despite this issue however, Palmer (2014) reports that default rates were increased in a multivariate regression as loan to value ratio rose and for loans that were to declared non-owner occupiers.

13. There are are also several structural or theoretical factors which appear likely to make investor lending riskier at any given LVR. First, for a typical investor who owns their own home and several others at, for example, 80 percent LVR, their gearing relative to their labour income will be substantially higher than for a typical owner-occupier at the same LVR. This means that a substantial fall in house prices would leave the investor much more heavily underwater relative to their labour income. This diminishes their incentive to continue to service the mortgage (relative to alternatives such as entering bankruptcy).

14. Second, some investors are likely to not own their own home directly (it may be in a trust and not used as security, or they may rent the home they live in). Again, this is likely to increase the incentive to stop servicing debt if it exceeds the value of their investment property portfolio. The Reserve Bank considers 'strategic default' to be unlikely for owner occupiers in most circumstances, but it is a more realistic prospect for investors in severe downturns.

15. Third, as property investor loans are disproportionately interest-only borrowers, they tend to remain nearer to the origination LVR, whereas owner-occupiers will tend to reduce their LVR through principal repayments. Evidence suggests that delinquency on mortgage loans is highest in the years immediately after the loan is signed. As equity in a property increases through principal repayments, the risk of a particular loan falls. However, this does not occur to the same extent with interest-only loans.

16. Finally, investors may face additional income volatility related to the possibility that the rental market they are operating in weakens in a severe recession (if tenants are in arrears or are hard to replace when they leave, for example). Furthermore, this income volatility is more closely correlated with the valuation of the underlying asset, since it is harder to sell an investment property that can't find a tenant.

17. The Reserve Bank considers that the Basel recommendations on the IRB approach and the observations from overseas warrant a re-consideration of the current practice of grouping all residential property loans in the same asset class. In addition, there are New Zealand specific considerations that play an important role in revisiting the asset class treatment of residential proeprty investment loans.

18. The Reserve Bank is tasked with maintaining a sound and efficient financial system.[5] Capital adequacy requirements are an important tool for the Reserve Bank in achieving this objective. The Reserve Bank's capital adequacy requirements as set out in BS2A and BS2B for standardised banks and internal models banks respectively aim to maintain the long run finanical stability of the banking sector. These long run requirements incorporate short term divergences from long run conditions. At times, however, markets can become unhinged and move away from long run conditions in a way that it can endanger financial stability. Irrational behaviour on the part of market actors leading to unsustainable asset prices are an example of this. The Reserve Bank has a range of macro-prudential tools at its disposal to address these risks. They include additional capital buffers and the imposition of restrictions on the lending banks can do.

19. It is well-documented that the Reserve Bank has been concerned about the housing market particularly in Auckland for some time.[6] In this context, the Reserve Bank has also stated that further macro-prudential action may be required to reduce the risks associated with a sharp correction of high house prices in Auckland. The re-emergence of stronger house price growth in Auckland is correlated with a higher proportion of sales involving residential property investors. The current practice of grouping all mortgage loans in one asset class may make it more difficult for the Reserve Bank to implement a macro-prudential restriction specifically targetted at residential property investors.

20. Although the Basel guidelines for IRB banks envisage that loans to residential property investors be treated as non-retail lending, the same is not the case for banks operating on the standardised approach. The Basel guidelines consider all mortgage lending within the standardised approach as retail lending within the same sub-asset class. However, the guidelines also provide regulators with ample flexibility to implement them according to the needs of their respective jurisdictions. There are three reasons why any consideration as to whether to group loans to residential property investors in New Zealand should also include standardised banks.

21. This first is that the different risk profile of property investors applies irrespective of whether the lending bank is a bank operating on the standardised approach or on the internal models approach.

22. Second, macro-prudential considerations include standardised banks as well as internal models banks. Prepositioning banks for a potential macro-prudential restriction on lending to residential property investors has to involve all locally incorporated banks. [7]

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[5] See section 68 of the Reserve Bank Act. The following link provides more information on the legislation under which the Reserve Bank operates. http://www.rbnz.govt.nz/about_us/our_legislation/

[6] See, for example, speech by Deputy-Governor G Spencer "Action needed to reduce housing imbalances", 15 April 2015 available at http://www.rbnz.govt.nz/research_and_publications/speeches/2015/action-needed-to-reduce-housing-imbalances.html . More information is also available in the Reserve Bank's Financial Stability Reports available at http://www.rbnz.govt.nz/financial_stability/financial_stability_report/

[7] A macro-prudential restriction would also apply to branches of overseas registered banks.

23. The third argument is that risk weights on housing loans are comparatively high in New Zealand and, more crucially, the gap in mortgage lending risk weights between standardised and IRB banks is not as high as it might be in many other jurisdictions. In order to maintain the relativities between the two groups of banks for residential investment property lending, it would be useful to also include standardised banks in the policy considerations.

24. In summary, the problem is that the current practice of grouping all residential mortgage loans in the same asset class might mean that loans to residential property investors are not backed by capital that is commensurate with their risk profile. There are indications from overseas experience and theoretical considerations that residential property investment lending might have a different risk profile from lending to owner-occupiers. As far as the internal models approach is concerned, New Zealand is currently out of line with the Basel recommendations. A New Zealand-specific consideration is the possibility of a macro-prudential restriction on residential property investment lending, whose implementation would be facilitated by a separate asset class for residential property investment loans.

Objectives

25. The Reserve Bank's main objective with regard to the financial system is defined in the Reserve Bank Act, Section 68. That section states that the Reserve Bank is tasked with maintaining a sound and efficient financial system. This is the overarching objective of all capital adequacy-related policies for banks.

26. Specifically, capital adequacy requirements aim to ensure that banks hold an appropriate amount of capital for the risks associated with their lending profile. In setting capital adequacy requirements, the Reserve Bank has regard to the costs imposed on banks and the effect its policies have on banks' ability to provide financial services to the public and the maintenance of a competitive and efficient banking sector.

27. Below these higher level objectives, there are four concrete objectives the Reserve Bank intends to achieve in this case. The first is to ensure that banks hold sufficient capital for their residential property investment lending that is commensurate with the risks associated with these loans. Second, since the Reserve Bank generally endeavors to align its capital adequacy requirements with the Basel guidelines unless there are good reasons not to do so, it wants to review whether the current practice of grouping all mortgage loans in the same asset class within BS2B is correct for New Zealand. The third objective is to facilitate the potential introduction of a macro-prudential policy on residential property investment lending. Fourth, these objectives are to be achieved without producing any unnecessary costs and only if the expected benefits outweigh the expected costs.

Policy options

<u>Do nothing</u>

28. The first option is to do nothing, or to leave things as they are. There would be no changes made to the current capital adequacy requirements. Banks would continue

to group all residential mortgage loans in the same retail asset class. From the banks' point of view, a main benefit would be no implementation and compliance costs that might result from a change to the capital adequacy requirements.

29. The capital adequacy requirements for internal models banks would continue to be out of line with the Basel guidelines. Since Basel clearly views residential mortgage investment loans as having a different risk profile from loans to owner-occupiers, something which recent evidence from countries that have experienced a significant housing downturn appears to corroborate, there is a risk that internal models banks in New Zealand would not be holding an appropriate amount of capital for their residential mortgage investment loans.

30. Although the Reserve Bank's requirements for standardised banks would not be out of line with Basel and the Reserve Bank's capital adequacy requirements do at times diverge from Basel where it is in New Zealand's interest to do so, the observations from Ireland, the US and the UK reported above do present a reasonable basis on which to conclude that residential property investment loans could have a different risk profile from owner-occupied mortgages in a severe downturn. While definitions and lending practices may differ across jurisdictions, and the Reserve Bank would caution against taking the findings from those other countries as directly applicable to New Zealand, they give an indication as to the potential behaviour of such loans in a severe downturn. The Reserve Bank considers that the higher default rates for property investors may partly reflect borrowers' willingness to hold own to an owner-occupied property versus one that is rented out..

31. Furthermore, this option would not facilitate the possible introduction of a macro-prudential restriction on banks' residential property investment lending. While this consideration on its own is unlikely to provide sufficient grounds for amending the capital adequacy requirements in a significant way, they are an additional point for the Reserve Bank to consider.

32. This option would not impose any new compliance costs on banks. However, it would not meet the objectives of having capital requirements that reflect the risk profile of banks' lending categories, nor would it facilitate macro-prudential policy. This option is rejected so long as at least one of the following options produces higher net benefits than this option. The following options are assessed against this baseline, do nothing option.

<u>Count-based threshold of five properties or more</u>

33. Option 2 would seek to target only those residential property investors who are investing in residential property in a business-like manner. This would be defined as investors with mortgages for five or more residential properties. The Reserve Bank consulted on this option from 20 September 2013 to 25 October 2013 and again on the technical detail of implementing such a policy from 28 March to 28 April 2014.

34. This option would go some way towards meeting the Basel guidelines or, depending on one's interpretation of them, might even be fully in line with them. The relevant recommendation in the Basel guidelines allows the regulator to apply discretion to reflect national specificities. The relatively high rate of home ownership in New

Zealand coupled with New Zealanders proclivity to invest in further property, such as a rental flat or an additional house to the one that is owner-occupied, without necessarily considering themselves to be large-scale residential property investors could be taken into account by this rule.

35. Investors with mortgages on a number of properties may be a higher credit risk in a severe downturn compared with owner-occupiers. This is notwithstanding the notion that multiple properties produces income diversification and reduces the impact of any one property being vacant on the investor's cash-flow. These benefits may be much stronger during normal economic conditions than they are in a severe downturn when a number or all cash-flow streams may come under pressure. The option would allow the higher risk of property investors to be reflected in the capital a bank has to hold for loans to this group of borrowers.

36. However, the threshold of five properties is somewhat arbitrary, although it is based on internal rules some banks currently apply. The rule would not capture the portion of residential property investment lending that is below the threshold. To the extent that those loans also have a higher risk profile than owner-occupied mortgage loans, this option would only partially achieve the objective of producing appropriate capital levels for banks' residential property investment lending.

37. The separate treatment of property investors could be extended to standardised banks, too. That would mean diverging from the Basel recommendations for standardised banks but the higher risk profile of property investors applies irrespective of the capital adequacy approach under which the bank operates. The higher risk weights within the standardised approach may make some allowance for the higher risk of property investment loans but that may not be enough to fully account for the additional risk. Introducing the same requirements within the standardised approach would facilitate a potential macro-prudential policy, thus meeting that objective.

38. Although this option might only partially meet the objective of producing appropriate capital adequacy requirements for banks' residential property lending due to a portion of this type of lending not being captured, that in itself would not rule it out if its costs were low. However, that is not the case. Feedback from the banks suggested that this option would lead to implementation costs and also further compliance costs. All banks said that they would have to amend their IT systems, some banks more than others, and retrain frontline staff. One bank estimated the initial implementation cost to be at least $ 0.5m in a follow up meeting with the Reserve Bank. In addition to the initial implementation cost, banks would incur ongoing compliance costs. For example, banks would have to monitor a borrower's number of mortgage loans. That would be particularly difficult for customers who borrow from different banks and add further compliance costs. Due to these costs, two banks in particular were strongly opposed to this option and favoured an option that would take into account a customer's reliance on the rental income for servicing the mortgage.

39. Banks also argued that this option could have some unintended consequences such as customers dividing their banking across different banks. Not only would this make

it difficult for the banks to keep track of a customer's number of properties, banks also felt that they would lose their whole of customer view, which might have the potential to affect banks' ability accurately to measure their customers' risk. A further point raised by banks was the question of how to deal with partial ownership structures or where properties are owned by a family trust. Customers moving either way across the threshold was seen by banks as potentially difficult as there are costs associated with re-classifying a customer.

40. The advantage of this option is that it provides flexibility to take New Zealand specific housing market considerations into account while capturing loans to business-like property investors. Facilitating macro-prudential policy would require standardised banks to also be included. The drawback of this option is that not all loans to residential property investors would be captured. It would also leave some room for property investors to get around being caught, for example by dividing property between family members, e.g. spouses, and it could have some consequences such as split banking, which banks view as negative. Moreover, it comes with significant implementation costs and ongoing monitoring costs. While this option better achieves the objectives compared to the first option, it does so by producing costs and potential negative follow on consequences for banks. Whether this option produces a net benefit depends on the weight placed on the improvement in financial stability from a more appropriate capital backing of residential property investment loans as captured by this option and how that compares with the potential efficiency implications from the costs associated with this option.

<u>Reliance on rental income for servicing the mortgage loan</u>

41. The next option is based on the extent to which the servicing of a mortgage loan is reliant on the rental income generated by the underlying property. There are different calibration options within this option.

42. One option the Reserve Bank consulted on as an alternative to the five properties rule was to classify a loan a residential property investment loan if the rental income was needed to cover fifty percent or more of the loan servicing costs. In other words, a borrower might have different sources of income, such as a salary income and rental income from the underlying property. If the salary income after taking account of other obligations and normal living expenses is sufficient to service at least fifty percent of the mortgage costs on a rental property, then the loan on that property would not be considered a residential property investment loan. If, however, rental income from that property is needed to service fifty percent or more of the mortgage costs, then it would be classified as a residential property investment loan. Loan servicing costs in this context include principal repayment and interest.

43. A stricter test along these lines would be to make the property investment loan classification dependent on whether any rental income from the property whatsoever is needed to cover the loan servicing costs. For example, if a customer had enough income from other sources to service the loan without needing any of the rental income, then the loan would be treated as a non property investment loan. However, if the loan servicing costs relied on any rental income from the property, or if other income sources were not sufficient to cover the loan servicing costs without some

contribution from the rental income, then the loan would have to be classified as a residential property investment loan.

Fifty percent option

44. The advantage of this option is that a high degree of flexibility could be shown towards small property investors if the fifty percent test were used. That could take account of New Zealand circumstances where property ownership is more widespread than in some other jurisdictions and investing in a second or third property is reasonably common. On the other hand, the reliance on the rental income to a significant extent could suggest that the risk profile is different from owner-occupiers, and this option would allow someone to borrow a substantial amount of money to buy rental property before that borrowing would be classified as residential property investment lending. Moreover, it would allow borrowers with substantial equity in their owner-occupied property to accumulate potentially significant investment portfolios before being considered property investors, although one could argue that the equity in the owner-occupied property reduces the risk profile.

45. The effect of this option in terms of capturing borrowers would be similar to the five property rule discussed above. However, there is a question as to whether a loan that was to a substantial extent, e.g. up to 50 percent, reliant on rental income has a risk profile that is more similar to that of an owner-occupier mortgage, or whether it is not closer to that of a property investor loan. This sub option appears to go some way towards meeting the objective of having capital requirements that reflect a loan's risk but a number of property investment loans would not be caught under this option. In itself, that might not be a problem. However, some of the other objectives mentioned above are also only partially met.

46. This sub option would allow a macro prudential policy to be targeted relatively easily at those captured by the 50 percent rental income test. That would leave a number of residential property investment loans, those to borrowers with sufficient other sources of income, unaffected, with consequences for the effectiveness of a macro-prudential policy if such a policy were based on this property investment definition. The way around that would be to apply a different definition for the macro-prudential policy but that would come with further compliance costs and could lead to confusion. From a macro-prudential and a prudential point of view, two different definitions of what is a residential property investment loan would be suboptimal.

47. A bigger obstacle is that the 50 percent rental income test would impose compliance costs on banks and that these costs might be higher than they would be for some of the alternatives. The Reserve Bank consulted on the type of income test described in this sub option in September to October 2013 and in March to April 2014. The first of these consultations was aimed at IRB banks only and proposed the rental income test as an alternative and a complement to the count-based threshold. Two of the four currently accredited IRB banks argued that the income test would be more costly to implement than the count-based alternative. The second consultation included all banks and included an option of defining a property investment loan as any residential mortgage loan that is not for an owner-occupied property as an alternative. Without specifying the costs involved, the vast majority of banks argued

that the 50 percent income test would be more onerous and costly than the alternative. Those higher costs would come from costs associated with training staff, changing IT systems and data collection and maintenance.

48. Given the assessment by banks that the 50 percent rental income test would be administratively costly in addition to it only partially achieving some of the other objectives, the Reserve Bank has decided to not pursue this option any further.

Any rental income

49. The second sub option is to make the definition of a residential property investment loan dependent on whether the loan servicing is at all dependent on the rental income of the property. If it is, irrespective of the extent to which it is, then it would be classified as a residential property investment loan. This would be a stricter test and capture more loans. It would better meet the objectives of getting banks to hold adequate capital for property investment loans and might mean that no second definition needs to be used for a macro-prudential policy intervention, if activated, due to the higher number of loans being captured. The option would also allow for some flexibility for loans whose servicing costs could be covered by the borrower’s other income sources, thereby exempting some loans on baches, small flats or second houses that only generate a temporary and limited rental income.

50. The significant downside to this option is the comparatively high compliance cost as assessed by the banks. When offered as an alternative to the option of defining any loan on a property that is not owner-occupied as a residential property investment loan, banks almost unanimously argued that this option would be more costly to comply with and thus preferred the alternative. Based on that feedback, this option would not meet the objective of keeping unnecessary compliance costs low.

<u>Any mortgage loan on a property that is not owner-occupied</u>

51. As already mentioned, the Reserve Bank consulted on an option to classify any loan for a residential property that is not owner-occupied as a residential property investment loan between 05 March and 17 April 2015. The benefit of this option is that it would be reasonably unambiguous and capture all or most loans for properties that are not owner-occupied. A household could have more than one owner-occupied property, for example in the case of a family home and another property that is used during the week for work purposes. Some allowance could be made for second properties from which only a small renal income is derived. Examples of this might be a bach or a holiday home that is rented out only a few weeks a year and where the rental income is irrelevant to the servicing of the loan.

52. The advantage of this option is that all loans on non-owner occupied properties, bar the few exceptions stated above, would be captured by this option. This would facilitate banks’ holding adequate levels of capital for their residential property investor lending and the implementation of a potential macro-prudential policy. For IRB banks, this option would also closely align the Reserve Bank’s capital adequacy requirements with the Basel recommendations. The application of this policy to standardized banks would introduce a divergence from Basel, although it is one that

leads to a more conservative capital outcome and is within the regulator's remit of exercising discretion to reflect domestic circumstances.

53. The vast majority of banks stated their wish that this option be used if there was to be a separate asset class for residential property investors. The main reasons were the relative ease with which this option could be implemented compared to the alternative of a rental income-based test and linked to that lower compliance and implementation costs. Smaller banks estimated that it would cost them between $ 0.25 and 0.5m to implement this option. The bigger banks, who are also the IRB banks, estimated those costs to be between $ 1.3 and 5m. However, these figures include the cost of developing a new probability of default model, which may not be immediately necessary. IRB banks have to estimate key parameters of the risk weight calculation based on their own models. One such parameter is the probability of default. The observations from the UK show that long run average of the probability of default between owner-occupiers and property investors might be reasonably similar (see Figure 2 in paragraph 4). IRB banks will, however, have to satisfy the Reserve Bank that this evidence also applies to New Zealand and that the risk drivers between the two groups of borrowers are the same. Similar PD estimates do not necessarily mean that they have the same risk drivers.

54. Against the compliance costs incurred by the banks, one has to hold the benefits from better aligned capital requirements. These benefits are in the form of enhanced stability and efficiency of the banking sector. Their size depends on the calibration of the capital requirements and there could be trade offs between the stability and the efficiency elements. A calibration that is extremely high in terms of the capital outcome would make banks' residential property investment lending safe but might impede efficiency through potentially making it unnecessarily costly. Likewise, a calibration that is too low could incentivize banks to increase their residential property investment lending while not holding capital commensurate with the risks involved. That would affect soundness and possibly also efficiency by distorting incentives in favour of this type of lending.

55. The Reserve Bank consulted on calibrations that were aimed at making capital requirements commensurate with the risk involved in residential property investment lending as far as possible. Building on the analysis presented in the problem definition of this RIS, for IRB banks the proposed calibrations consist of higher correlation factors in the Basel equation and higher loss given default (LGD) rates compared to the current calibrations for all mortgage loans, which would continue to apply to owner-occupier mortgages (see new Table 4.11 and 4.11A in BS2B below). The higher correlation factors for residential property investment mortgages reflect the higher systemic risk to which these loans are exposed, as evidenced by the higher default rates associated with property investor loans during severe housing market downturns.

56. The LGD rates reflect the poorer quality of rental accommodation compared with owner-occupied accommodation.[8] Possible reasons may be deferred maintenance

[8] For a couple of examples of surveys that conclude that rental accommodation is generally of lower quality than owner-occupied accommodation, see here:

on rental properties and owner-occupiers looking after their properties better than tenants do. Assuming that a property investor will continue to rent out the property as long as the rental makes it economical to do so, it might also be more difficult to sell a property to clear a loan if it is in an area where that is no longer the case.

57. The Reserve Bank would expect banks to continue to use their current PD models until such time that new models have been developed or banks have been able to verify that the current models can also be applied to property investment loans. Through the cycle PD rates appear broadly similar to those of owner-occupiers if the evidence from overseas also holds for New Zealand, although it is not clear whether the risk drivers are the same between the two groups of mortgage borrowers. The Reserve Bank would therefore expect banks to assess in due course whether their current PD mortgage models can be used for the new asset class or whether new or amended versions of the current models should be used.

New Table 4.11: Minimum LGDs for residential mortgage loans[9]

LVR in %	LGD in %, non-property investment residential mortgage loans	LGD in %, property investment residential mortgage loans
90-100	38	40
80-89	33.25	35.5
70-79	28.5	31
60-69	19	21.5
Under 60	10	12.5

New Table 4.11A: Correlation factors for residential mortgage loans

LVR	Correlation (R), non-property investment residential mortgage loan	Correlation (R), property investment residential mortgage loan
Above 90 percent	0.21	0.24
80 to 90 percent	0.20	0.23
Below 80 percent	0.15	0.17

58. For standardized banks, the Reserve Bank has to prescribe the risk weights as per the relevant capital adequacy requirements. Those requirements currently link a loan's risk weight to its LVR at origination. Maintaining that link, the Reserve Bank proposed higher risk weights per LVR band as per the new table in BS2A below.

http://communityhousing.org.nz/files/7114/1704/7943/Beacon_report_Performance_of_Rental_Housing_v3.pdf and
http://www.branz.co.nz/cms_show_download.php?id=53af2b0c2e5ca5169a0176996bba7ee88de082c0

[9] The numbering of the tables follows their numbering in BS2A and BS2B, the Reserve Bank's capital adequacy requirements for standardised and IRB banks respectively. Text highlighted in yellow shows new additions.

New Table 4.11: Risk weights for claims secured by first mortgages over residential property

Loan-to-value ratio	Risk weight in %			
	If there is lender's mortgage insurance that qualifies under section 38		If there is no lender's mortgage insurance or lender's mortgage insurance that does not qualify under section 38	
	Non-property investment residential mortgage loans	Property investment residential mortgage loans	Non-property investment residential mortgage loans	Property investment residential mortgage loans
Does not exceed 80 %	35	40	35	40
81 to 90 %	35	50	50	70
91 to 100%	50	75	75	90
Exceeds 100%	100			

59. These calibrations would lead to a higher capital outcome for residential property investment mortgages compared to owner-occupier loans. However, the capital outcome would be below that of using the income producing real estate asset class[10] and, in the Reserve Bank's opinion, reflect the mix of property investment borrowers that the new asset class would entail.

60. The Reserve Bank also proposes to continue to allow retail asset class treatment. That would allow banks to continue to portfolio manage these customers, as opposed to having to individually manage them as under the IRB approach. This is a slight departure from the Basel IRB recommendation, which foresees use of the corporate asset class. The Reserve Bank considers that the New Zealand property investor landscape, which includes a significant proportion of relatively small investors, justifies retail treatment.

61. Banks commenting on these proposals when they were put forward in the March to April 2015 consultation did not raise any major objections to either proposal. Some banks argued that the calibrations should be the same as for owner-occupiers or that those for owner-occupiers should be lowered. The Reserve Bank is not inclined to lower the current calibrations for the time being but would revisit all calibrations in due course.

62. The vast majority of banks supported the retail asset class treatment if a new asset were introduced.

[10] This is a subset of the corporate asset class for specialised lending within the capital requirements for IRB banks.

63. The appeal of this option is that it would meet all of the objectives reasonably well. It would capture the vast majority of residential property investment loans. The proposed calibration would lead to a capital outcome more commensurate with the higher risk profile of these loans. A macro-prudential policy could be targeted relatively easily at the loans captured by the new asset class. And the compliance costs are less than those of the alternative options except the do nothing option.

Preferred option

64. For the reasons summarized in this RIS, it is recommended that the option based on the owner-occupier status of the property is chosen as the preferred policy option.

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