Supplementary Stabilisation Instruments

Initial Report
to
Governor, Reserve Bank of New Zealand
Secretary to the Treasury

10 February 2006

Executive Summary

1. The large and prolonged housing market cycle of recent years, and the associated pressure this appears to have placed on domestic resources, the inflation outlook, and the exchange rate, prompted you to commission this review. The review has looked at whether there might be useful tools, with a direct bearing on the housing market and/or the market for residential mortgage credit, which could supplement the central role of interest rates in managing inflation, either in this cycle or in future cycles in which housing-related pressures played a particularly important role. If such measures, targeted more closely to the housing or housing finance sectors, were available they might alleviate some of the pressures on the exchange rate, and on the tradables sector of the economy. A joint Treasury and Reserve Bank team has explored a range of options in this paper.

2. There are a number of areas where further work and policy development could be appropriate. However, it should come as no surprise that there are no simple, or readily implemented, options that would provide large payoffs.

3. Tailoring bank capital requirements better to the risk characteristics of loan portfolios and to the wider economic environment is an important element in refining the regulatory regime for New Zealand banks. Consideration of these issues will be a part of the implementation of the new Basel II framework over the next couple of years. Earlier, more limited, modifications to the existing capital adequacy regime could probably be made quite quickly. As the capital requirements for banks are refined, the banking system should be better placed to cope with periods of financial stress. It is less clear, however, what contribution modifications of this sort would make (as an ancillary benefit) to dampening this, or future, housing cycles, and hence how much pressure they might relieve from the Official Cash Rate (OCR) and the exchange rate. We would not expect these effects to be large, particularly for modifications to the existing regime, and hence we would be hesitant about promoting any early modification of the existing regime ahead of the Basel II schedule, except as a means of focusing banks on the emphasis the Reserve Bank will be putting on these risks in implementing the new Basel II framework.

4. Of the housing taxation instruments reviewed, there could be merit in encouraging Inland Revenue to have regard to broader cyclical stabilisation considerations when assessing the priority given to the enforcement of the existing income tax provisions that make liable for income tax any capital gains on properties (other than those occupied by the owner) purchased with the intention of resale. This would be a departure from the current practice and, as such, would raise a number of issues which

would require further work, including determining the legislative basis for such a change in focus. At the margin, greater awareness of the existing tax law, and more stringent enforcement, might offer some incremental gains in dampening housing inflation in periods of particular stress. Given the growing number of investment properties reporting losses for income tax purposes, there may also be merit in some further work assessing whether the tax treatment of losses on investment property has played an important role in the cyclical behaviour of the housing market in recent years. We would note, however, that there is no clear evidence that ring-fencing such losses is associated with less pronounced housing cycles in other countries.

5. We also consider that further work would be warranted to examine issues around land use and the ability of housing supply to respond promptly to rising prices and other indications of rising demand for housing. The American literature, for example, highlights the differences in housing cycles between markets where supply is able to respond quickly and those where that supply responds only slowly.

6. Direct discretionary stabilisation instruments, such as a comprehensive limit on loan to value ratios or a mortgage interest levy, could be used to supplement the OCR at periods of particular pressure on the housing market. Of the two options examined here, a mortgage interest levy has the merit of being an explicitly price-based instrument. Instruments of this sort, which go well beyond the mainstream of international thinking about managing cycles, might appear to offer an effective technical means of influencing the housing cycle. But they also pose a variety of quite substantial problems, including issues around the extent to which such new statutory powers could appropriately be delegated (especially tax-based provisions), consistency with New Zealand's international commitments, and the difficulty of maintaining a strong and ongoing enforcement regime. Some implementation options could also risk eroding the operational autonomy of the Reserve Bank in the conduct of monetary policy. If you wished to consider this option further some quite extensive work would need to be done to address a number of the issues raised in this report. It would, then, also be desirable to consider this option against other possible measures for easing demand pressures, including discretionary tax ones, which were outside the scope of this particular report.

7. The tables on the following two pages outline in summary form the key considerations relating to each of the options that we examined in greater detail.

	Tax on property purchased for resale	Ring-fencing	Improve responsiveness of housing supply
Description	Increased publicity and increased enforcement of current law (making gains on non owner-occupied properties purchased with the intention of resale liable for income tax). Other options: require reporting of all sales of property held for less than two years, or remove the exemption for owner-occupied property held for less than two years.	Prevent operating losses on investment properties being offset against other income.	Measures to increase the speed at which new land and houses are able to be brought onto the market in response to evidence of rising demand
Effects on cycle	Limited positive effects are possible (the more so, the more far-reaching the measures).	Likely to be quite limited (little evidence that cycles are more muted in countries that ring-fence).	Favourable, but hard to predict reliably how strong the effects would be. Any impact in dampening house price cycles would be offset, to some extent, by intensified pressure in the construction sector.
Other impacts (efficiency, stability, distribution)	Increased publicity and increased enforcement of existing law would have low efficiency costs. More far-reaching measures would involve greater administrative, compliance, and avoidance costs. Unlikely to be material adverse distributional impacts.	Immediate impact likely to be greatest on smaller and highly-leveraged participants in (and often new entrants to) the investment property market. Ongoing enforcement challenges and costs, and perhaps at the margin a reduction in the supply of rental properties. Represents a departure from the principle of treating similar investment activities similarly.	Should be generally favourable and, by improving affordability, should also have positive distributional impacts.
Implementation (enforcement, timing, legislation)	Heightening awareness of existing rules could be done quickly, although the legislative basis for any increased enforcement would need to be determined. A more extensive reporting framework would require legislation. Long-term effectiveness would be a challenge, with strong incentives to avoid any two year reporting threshold.	Would require new legislation. Longer-term enforcement challenges, especially for more sophisticated and diversified investors.	Significant lags, because many constraints are likely to involve a wide variety of local authority rules. Understanding these and securing changes would take considerable further time and effort.
Initial Assessment	Could be merit in encouraging IRD to factor in broader cyclical considerations when allocating audit resources. Impact on cycle likely to be a limited. Before taking the other options above any further, additional work would be needed to understand better the role of speculative factors in housing cycles.	Not favoured. Little evidence that housing cycles are less marked in those countries that ring-fence than in those that do not.	Work in this area, building on what has already been commissioned, appears likely to be promising in the longer-term.

	Linking bank capital to cyclical risk	**Discretionary loan to value ratio limit**	**Discretionary mortgage interest levy**
Description	Ensuring that bank capital requirements, under Basel II are better tailored to cyclical risks. Possible earlier modifications to Basel I, to link capital to loan to value ratios.	Comprehensive limit on loan to value ratio, imposed on all lenders and all loans secured by residential property. Able to be triggered at the discretion of the Reserve Bank, in response to periods of particular stress in the housing market.	Levy imposed on all loans, by all lenders, secured by residential property. Able to be triggered in response to periods of particular pressure in the housing market and when the gap between NZ and foreign interest rates in unusually large.
Effects on cycle	Likely to be quite limited. Main aim of the framework would be to ensure that banks have sufficient capital to cope with downturns rather than to dampen lending cycles.	Could be material, although would depend on correctly calibrating the scheme.	Could be material, by establishing a wedge between domestic mortgage borrowing costs and returns available to depositors.
Other impacts (efficiency, stability, distribution)	Limited adverse effects, as any changes would be designed to better align capital requirements with risk.	Poorly targeted and would impinge most directly on lower income and first home buyers. Could also constrain small and medium enterprise borrowing. Ongoing efficiency costs, heightened because it is a direct control.	Real resource costs devoted to implementing and maintaining the regime. Raises price of residential mortgage credit relative to other forms of credit, irrespective of relative risk considerations. Lowers returns to savers. Any increases in mortgage rates would fall most heavily on lower income borrowers and highly-geared new entrants to the housing market.
Implementation (enforcement, timing, legislation)	Basel II regime will not be in force for some time. Modifications to the existing requirements could be implemented quite quickly. If such measures had much effect on bank housing lending, disintermediation would be a concern because the existing powers affect registered banks only.	Would require new legislation. Long-term enforcement would rest with the Reserve Bank and would be a major challenge (especially for an instrument used infrequently). Particular difficulties may arise in avoiding offshore disintermediation.	Would require new legislation (with significant issues around ability to delegate authority to trigger the levy). Longer-term enforcement by IRD would face considerable ongoing challenges
Initial Assessment	Shift to Basel II should ensure that over time capital requirements are better tailored to risk. Limited ancillary counter-cyclical benefits are also possible. Weaker case for changes to Basel I, although might have positive signalling benefits.	A direct control instrument and one which is relatively poorly targeted. This, together with the likely ongoing enforcement problems, suggests this instrument should not be developed further.	Better-targeted and with the advantage of being explicitly price-based. Enforcement would be a continuing challenge. Further work would be needed in a number of areas. In any overall assessment other discretionary demand management tools (including tax ones) beyond the scope of this review would desirably be considered.

Supplementary Stabilisation Instruments
An Initial Report

Introduction

8. In November 2005, Terms of Reference were established for the Supplementary Stabilisation Instruments project. As the preamble to those terms of reference noted:

9. > The strength and persistence of domestic demand, the scale of the accompanying external imbalances, and the key role being played by the current house price cycle, have prompted officials to explore whether ancillary instruments could be deployed to complement monetary policy in the task of managing inflation pressures. Such tools, if they exist, could enable less reliance to be placed on the OCR and, hence, reduce some of the pressure on the exchange rate.

10. In particular, this review was asked to examine "structural and cyclical policies" that made sense in the longer-term, but which could also be implemented relatively quickly and which might have a direct bearing on the housing market, and credit secured on residential properties, independently of changes in the Official Cash Rate (OCR). The OCR is an instrument that operates across the entire economy, and this review has been looking at whether options might exist that more sharply focus on the on the areas of the economy imposing particular strain on resources.

11. Housing has played a key role in the most recent cycle, both in terms of the direct impact on measures of inflation such as the CPI, and through the impact that perceptions of rising housing wealth appear to have had on consumer demand and activity across the entire economy. Perhaps as importantly, housing cycles are a common feature of developed market economies (indeed, in a number of cases, housing cycles played a role in buffering economies from the downturn in global growth earlier this decade. Moreover, in some (although not all) future New Zealand economic cycles the housing market is likely to play a significant role. As we have prepared this report, we have sought to think in terms of how any possible measures might influence future cycles in which the housing market plays a particularly important role, as well as assessing any impact at this stage in the current cycle.

12. Although many of the issues and options have been explored previously, the current review has been undertaken against the backdrop of a housing market that, on a number of measures, is more stretched than it has been at any time since the boom of the mid 1970s. Moreover, the associated strength of domestic demand has been reflected in an unusually large deficit on the current account of the balance of payments. And the strength of the domestic economy, and the resulting increase in domestic interest rates, have contributed to the exchange rate holding up at historically high levels for a protracted period, placing considerable pressure on those parts of the economy that are heavily exposed to international competition. The scale of the imbalances appropriately prompted a review as to whether any other tools could ease the pressures facing monetary policy by targeting more directly the sources of excess demand pressure.

13. The review has, therefore, considered options that would directly affect the housing market or the market for finance secured on residential property. A variety of other tools or discretionary instruments, operating in other markets, could also effect cycles in demand and associated pressure on interest and exchange rates but these have consciously, and consistent with the Terms of Reference, not been considered as part of this project.

14. This report is organised as follows. Section 1 provides a brief outline of the economic situation that prompted this review. Section 2 reviews briefly the limited applicable international experience with the active use of tools other than interest rates to counter strong cyclical housing market pressures. Section 3 comprises the bulk of the report and is devoted to an assessment and evaluation of six options. Section 4 concludes with our overall assessment. An Appendix briefly reviews a wide range of other possible options, including both those suggested by outside commentators and those developed by the review team itself, and explains why we chose not to engage in more detailed evaluation of these options.

Section 1 Economic Background

15. Domestic demand has grown rapidly in New Zealand in recent years, supported by (but exceeding) a period of strong growth in the incomes of firms and households. Associated with this general strength in demand, house prices have risen rapidly – up by around 75 per cent nationwide since 2001. Expectations of further house price increases have become widely spread, encouraging purchasers into the market. For existing home owners, rising asset values have eased credit constraints and enabled them to borrow against the equity in their house. Earlier in the decade a buoyant housing market helped support overall growth at a time when global growth was weak, but more recently housing market pressures have contributed significantly to the recent sustained period of excess demand growth.

16. Rapid growth in house prices has been a widespread (although not universal) feature in developed economies in the last decade or so. The Netherlands, Australia, and the United Kingdom are three of the economies that have seen the most dramatic rises in real house prices, to levels that were widely regarded as unsustainable in the medium-term. In each of those three cases, the period of strongly rising house prices has now ceased, and in Australia real house prices are now edging back.

17. In New Zealand, house prices continued to rise strongly in 2005, up by around 15 per cent. Rapid house price inflation has posed a considerable challenge for monetary policy in New Zealand not just because of the relatively direct impact on the CPI, but also (and more importantly) because of the strong apparent connection between housing market activity, house price inflation, and inflation in the non-tradable sector of the economy more generally. Housing is a much larger share in the total wealth of New Zealand households than is seen in most other countries, even those with similar rates of home ownership. Moreover, large swings in net migration have historically played an important role in housing and demand cycles in New Zealand (net migration cycles, relative to population size, appear to be much larger in New Zealand than in other OECD countries).

18. The strength of overall domestic demand, fuelled in part by the continuing buoyancy of the housing market, has contributed to the Reserve Bank's decision to raise the OCR in successive steps by a total of 225 basis points in the last two years, to 7.25 per cent at present. At a time when interest rates in much of the rest of the world have been relatively low, and the appetite for risk (and the search for high yields) among investors has been increasing, longer-term domestic interest rates have responded only moderately to the sustained rise in the OCR. During 2005, $26 billion of funds were invested in eurokiwi and New Zealand dollar uridashi bond issues, which finds its way back (through the swaps market) to finance the borrowing demands of New Zealand firms and households. Strong domestic demand, buoyant international commodity prices, and short-term interest rates that are high by world standards, have together contributed to the exchange rate (measured in trade-weighted terms) holding up at high levels for a prolonged period, reaching new post-float record highs as recently as December 2005. That, in turn, has placed increasing pressures on the competitiveness of the tradables sector of the economy. These pressures have been particularly evident in the manufacturing and tourism sectors, but are also becoming more apparent for primary producers as commodity prices have begun to ease back.

19. The current house price cycle is no ordinary event. As compared to the episode in the mid-1990s, house price inflation (in real terms) has been considerably greater, and more widely spread throughout the country. The closest historical comparison is probably with the house price boom of the early to mid-1970s, which was similar in magnitude to the current boom, and was fuelled by strong income growth, high commodity prices, and record migration inflows, spilling over into an appreciated real (revalued nominal) exchange rate. Moreover, our assessment is that house prices in New Zealand have moved beyond levels that can be warranted by medium-term economic fundamentals. Simple metrics such as house price to income and house price to rent ratios suggest levels of imbalance comparable to those of the mid-1970s.

20. The changing global financial environment has probably contributed to the recent widespread boom in house prices and the marked increase in overall household indebtedness. Financial liberalisation in a wide range of countries has materially improved access to credit, while the fall in nominal interest rates, as global inflation has been brought back under control, has also made a material difference to the ability of households to service conventional mortgages. In some respects, these changes will have affected all asset markets. However, housing is different for a number of reasons; most especially, because a house is the easiest asset for most people to finance, and because an owner-occupied house provides both the housing services we all need and the ability to bring forward consumption by borrowing against the equity in the home.

21. Over the longer-term, of course, provided that the supply of new houses is reasonably responsive to rising real house prices, the levels of neither real nor nominal interest rates should have a material impact on the sustainable longer-term level of house prices. Longer-term, costs of building materials for new construction tend not to increase much differently than consumer prices as a whole. Moreover, to the extent that real interest rates are permanently lower one should also expect to see a fall in real residential rentals over the long-run. Of course, these sorts of adjustments can take considerable time, and in the interim the perceived increase in housing wealth, and associated access to credit, can materially complicate the task of central banks in managing the economic cycle, and can contribute to generating imbalances which can be costly to correct.

22. Several of the policy options explored in this paper focus on investment properties, which form a considerable part of many New Zealanders' asset portfolios. We have not undertaken any comprehensive analysis to determine whether investment property transactions have played a disproportionate role in explaining the house price boom of recent years. However, our judgement is that although there may be some features of the tax treatment of investment properties which favour that form of savings in a structural sense, it seems unlikely that such factors have had a dominant influence on the character of the recent housing cycle. Tax treatment of housing has not become materially more favourable in recent years. (Indeed, in last year's Budget the tax treatment of depreciation on investment properties was tightened). However, in principle, features of the tax system such as the ability to fully deduct rental income losses against other incomes may tend to accentuate any incipient cycles in the housing market, because they ease the liquidity constraints some purchasers face and therefore enable some to leverage up more highly than they otherwise would.

23. Our assessment is that the factors driving the housing market have been largely macroeconomic in nature - the interplay between a strong domestic economy and relatively low international interest rates - accentuated by the sort of self-reinforcing behaviour that leads some potential purchasers to enter the market precisely because they see that prices have already risen strongly. Of course, buyers cannot borrow if there are no lenders willing to lend. The market in the provision of credit to households has become increasingly competitive in recent years, continuing the trend of the last couple of decades. At the margin, the competitive positions adopted by various lenders are likely to have affected the housing market to some extent during the recent cycle. If lending margins had not fallen, the OCR might have been able to be set a little lower, or inflation pressures might have been checked a little sooner. However, even if lending margins been wholly unchanged throughout the last few years it is unlikely that the essential nature of the housing cycle would have been very different.

24. The housing market is a diverse one. Of the residential properties in New Zealand, roughly one-third each are rented, are occupied by owners without a mortgage, and are occupied by owners with a mortgage outstanding. There is also a growing stock of second or holiday homes, and small (but rising) number owned by non-residents. The various measures examined in this paper would each work rather differently - some would affect first those purchasing investment properties, while others would have an initial impact more broadly across the class of those financing property on credit. We have not sought to focus exclusively on one group rather than another, and in particular have been very conscious that any measures that affect overall activity in the housing market, and prices of new and existing dwellings, are likely to affect consumption choices across the entire population of home owners and potential home buyers. Here, as in a variety of other countries, the perceived wealth gains from rapidly rising house prices, and the actual easing in credit constraints, appear to have supported strong domestic consumption growth, in turn helping to give rise to the sorts of inflation pressures that have led the Reserve Bank to raise the OCR quite markedly over the last couple of years.

25. It is important to reiterate that the focus of this project is in assisting monetary policy. That is, this review has not been undertaken with a view to targeting house prices as any sort of independent goal. There is no sense in which this review is about finding ways to burst a property market bubble. The task of monetary policy, as laid out in the Policy Targets Agreement, is to achieve future consumer price inflation outcomes of 1-3 per cent per annum on average over the medium term, and to do so in a way that seeks to avoid unnecessary instability in output, interest rates, and the exchange rate. As noted in the Terms of Reference, given the prolonged high level of the exchange rate, the focus here has been particularly on looking for measures that might enable the same degree of overall inflationary control to be maintained, without putting as much pressure on the exchange rate and the tradables sector of the economy. Housing market pressures will no doubt be to the fore in some, but not all, future cycles, and hence we have looked for measures that might be useful in future periods of particular pressure in the housing and housing-finance markets, as well as in the late stages of the current cycle.

Section 2 International Experiences with Alternative Tools

26. As already noted, rapid and/or sustained real house price inflation has been experienced by many countries in the last decade, and periods of strong house price inflation were often observed in various countries before that. In preparing this report, we reviewed the international experiences to see whether there were supplementary tools that had been successfully used by other countries to directly affect price pressures in housing markets. As outlined in the structure of this project, we looked for possible measures under three broad headings (a) structural measures that directly affected the attractiveness of housing and/or housing credit, (b) measures that could be incorporated into the prudential supervisory framework which might also help reduce the amplitude of house price cycles, and (c) any discretionary stabilisation measures that would be applied only in periods when inflationary pressures (particularly in the housing market were particularly intense).

27. Generally speaking, policymakers have tended to (and have been advised to by the literature in the area) focus on measures and instruments to promote the development of a robust financial and regulatory system, designed to limit incentives for economic actors to participate in asset bubbles, while ensuring that the booms and busts in credit and asset prices do not have major adverse consequences for the financial system. Such measures can take the form of prudential, supervisory and monitoring policies, measures designed to deepen financial markets where such markets lack maturity, and efforts to increase the understanding and appreciation of risk in its broader sense among firms, households, and financial intermediaries. New Zealand now has a strong and well-capitalised banking system, and a culture of risk management within the financial system.

28. Relatively little use has been made internationally of changes in the tax treatment of owner-occupied housing, with the aim of directly affecting the amplitude of housing cycles. In the Netherlands, for example, which experienced very strong house price inflation during the 1990s, deductibility of mortgage interest on second and subsequent houses was removed. However, this change was not made until 2001, after the housing price boom had largely ended. In New South Wales, a property vendor tax was put in place in May 2004, but was removed in August 2005. Again, house price inflation was already easing when the tax was introduced. Similarly, although deductibility has been phased out in the United Kingdom, the timing of these changes has not been with cyclical management considerations in mind.

29. More generally, the tax treatment of housing varies widely across countries and tends to change only slowly and infrequently, suggesting a limited role in explaining protracted, and internationally widespread, cycles in housing markets. There is little indication that house price cycles have been larger or more protracted in countries that have more generous tax treatments of housing.

30. In 1998, Denmark introduced a tax (averaging 1 per cent) on the market value of owner-occupied housing. This was expected to have some counter-cyclical benefits (acting as an automatic stabiliser) because the real tax liability would rise as the real house price rose. The ratio of household debt to disposable income in Denmark - already among the highest in the world - has continued to rise in recent years. Indeed, last year Danish

house prices rose more rapidly than those in other western European countries (and have risen, on average, over 5 per cent per annum in real terms since the early 1990s).

31. Restrictions on loan to value ratios for residential mortgages are relatively common in OECD and other developed countries. In some cases, these are absolute limits, and in others a threshold above which mortgage insurance is required. In some countries too (including Australia) an explicit link is drawn between loan to value ratios and the level of capital banks are required to hold against mortgages. However, these ratios are an integral part of the supervisory framework, and have not typically been adjusted in response to the state of the housing price cycle. The presence of such limits may, however, at the margin have acted as something of a dragging anchor, slowing any tendency towards a weakening in credit criteria during a housing boom. In two countries where such limits are not present (the UK and the Netherlands), loan to value ratios of 100 per cent of more became fairly widespread during the respective booms of the 1980s and 1990s. In a study conducted for the G10 group of central banks, the average loan to value ratio in those countries surveyed that had restrictions was between 71-75 per cent, while for countries with no restrictions the average LVR was 82 per cent. In the Netherlands, around the turn of the decade, the authorities were considering imposing maximum loan to value ratios, but the property market cooled and further consideration of such measures was deferred.

32. The experiences of Singapore, South Korea and Hong Kong perhaps come closest to the active use of maximum loan to value ratios for stabilisation purposes. In each of these cases in the course of the last 15 years, the maximum loan to value ratios have been reduced during the course of a housing market boom. The case of Hong Kong is widely cited, but it is worth noting that the Hong Kong Monetary Authority argues that banks had already begun to reduce loan to value ratios themselves and that the loan to value ratio limits were to be seen as essentially prudential in nature - they were not envisaged as a cyclical management tool. It is worth noting that the Hong Kong limits were relaxed in the late 1990s by the introduction of a higher limit for which mortgage insurance was required, and this is seen by some as having contributed a little to the rejuvenation of the Hong Kong property market. As always, it is very difficult to know quite what contribution policy measures made to specific housing cycles, many of which had probably already run most of their course by the time additional regulatory measures were adopted.

33. Loan to value ratio limits have become part of the policy package to curtail booming property markets associated with credit booms in emerging central and eastern European markets – particularly in Bulgaria and Romania. Credit auctions have also played a role in macroeconomic management in these economies.

34. A variety of other one-off and ad hoc measures have been used in the developed Asian economies including measures designed to discourage or prevent pre-selling of apartments, adjustments to capital gains tax exemption thresholds, and measures to increase the supply of housing (particularly important in Hong Kong where the government controlled the availability of land for development purposes). It is worth emphasising that, in these cases, rapid house price inflation had become highly unpopular (as housing affordability had come under so much strain), which meant that there was considerable public support for actions to tackle house prices (indeed, in some cases, competition to generate the most politically attractive measures).

35. Adjustments to the prudential supervision regime have played a part in various countries. For example, the introduction of dynamic provisioning in Spain (under which general loan loss provisions are increased during periods of cyclical strength when specific loss provisions are at their lowest) has attracted considerable attention in the literature. In Estonia, the authorities have recently announced measures to increase the risk weighting applied to housing mortgages (from 50 per cent to 100 per cent) in the calculation of bank capital adequacy requirements.

36. It is important to stress, however, that in most of the cases where discretionary measures have been used to attempt to combat pressures in the housing market, the authorities have had relatively limited (or no) scope to use traditional monetary instruments (ie interest rates). Examples include individual states within federal systems (such as New South Wales), countries within the euro-area (and its predecessors) such as Spain, Denmark, and the Netherlands[1], countries aspiring to join the euro-area (Estonia and most of the central and eastern European countries) and where euro-denominated financial contracts have already become widespread, and countries with a fixed exchange rate or currency board (Hong Kong and Estonia).

37. There is little or no precedent for the structured use of discretionary measures to tackle housing market pressures directly in countries with freely-floating exchange rates and with well-developed financial systems and sound credit cultures. In particular, there is no precedent for the development of systematic supplementary stabilisation tools that could be used routinely to complement interest rates at periods of particularly intense housing market pressures. If anything, most countries have chosen to make themselves increasingly reliant on interest rate instruments and indirect management of demand for credit, in the context of well-developed prudential regimes, as the complex administrative apparatuses that have often governed housing markets and access to personal credit in earlier decades have gradually been unwound.

[1] In 1991, late in the three year period when the pound sterling was fixed within the European exchange rate mechanism, the United Kingdom temporarily cut stamp duty quite markedly. This measure was designed to stimulate housing market turnover at a time when the fixed exchange rate regime meant that domestic interest rates could not be cut.

Section 3 Possible Policy Options

38. In preparing this report we have deliberately cast the net widely in search of possible policy options. Our work has been, and this report is, is grouped under three broad headings. We looked at a variety of possible structural measures directly affecting the housing market, and also at modifications to the capital adequacy regime for banks which might have some ancillary cyclical management benefits. As requested in the Terms of Reference we also developed and evaluated two more ambitious instruments, designed as supplementary discretionary tools that might be able to be used during periods of unusually intense pressure in the housing market to influence directly the quantity and/or price of mortgage lending.

39. This section contains a considered assessment of the six options we considered to be most plausible. For each, we attempt to outline carefully the best possible formulation of the option and to evaluate it against the criteria outlined in the Terms of Reference. The evaluation focuses first on the whether the instrument could be expected to have a meaningful impact on the housing cycle, and hence enable some pressure to be relieved from the exchange rate and the tradables sector (with associated efficiency gains). We look then at any other economic impacts, including possible adverse efficiency costs associated with sustainably implementing the instrument itself, and at the way in which the instrument might affect different wealth or income cohorts. We discuss implementation issues (both how quickly the measure could be implemented, and longer-term issues associated with maintaining the effectiveness of the tool). Finally, we provide an initial overall assessment of each of the instruments.

40. This is, of course, an initial report, done under a tight deadline. We have not been able to undertake detailed quantitative assessments of the effects of each of these measures, and so most impact assessments are qualitative or suggestive in nature. Where necessary, we have identified areas that would require further work if you wished to consider further one or more of these policy tools. One of the things that has become clear in the course of preparing this initial report is that, despite all the work that has gone into understanding household balance sheets in recent years, we still have only a relatively limited understanding of the micro-dynamics of housing market cycles. That means we are rather tentative in some areas about the role that specific measures targeted at possible policy issues in the housing market might play.

41. In an Appendix to this report we cover relatively briefly a larger number of options that were identified, but which for various reasons we did not consider warranted more detailed examination and evaluation. In each case, we explain why we chose not to examine the option further.

Section 3.1 Taxation of profits on properties purchased for resale

42. As is typical in most markets, over recent years increased housing turnover has accompanied the rise in house prices. Increased demand has induced existing house owners and developers to increase the supply of houses for sale. Increased supply helps dampen price increases and provide for an efficient allocation of the housing stock. However, some of the increase in turnover, has also involved a rise in the frequency at which the same house has turned over. Preliminary analysis of residential property sales data obtained from Quotable Value New Zealand indicates that almost 25 per cent of sales in 2005 were sales of properties that were owned for a period of less than two years, up from a level of around 10 per cent for corresponding sales in 2001. This may indicate that some people have been buying property with the intent of selling again relatively quickly, and counting on capital gains over the holding period. Such activity would tend to accentuate house price cycles.

Description

43. Under current tax law, income tax may apply to gains realised on property sold in a range of circumstances, one of which is when property was acquired with the purpose or intention of resale[2]. Under the intention test, it is necessary for the taxpayer's purpose or intention to have crystallised when the property is purchased. If such a purpose or intention exists at the time of purchase, the associated taxable income (effectively being the amount of the gain) must be included in the taxpayer's income tax return.

44. There are, however, significant exemptions from the application of this rule. A key exemption in the context of this report is in respect of owner-occupied residential land. Under the "residential land" exemption, a gain on the sale of land will not generally be subject to income tax where housing on that land was occupied mainly as a residence of the taxpayer, even when there was an intention to resell it. This exemption applies unless a person has established a regular pattern of acquiring and disposing of residential property. Hence, current rules are more focussed on business-like transactions rather than one-off sales of owner-occupied dwellings. Individual investment properties, purchased with the intention of resale, are subject to income tax.

45. In practice, however, Inland Revenue has identified a variable level of non-compliance with the existing rules that impose income tax on certain land sales. In response, Inland Revenue has been actively raising the profile of these rules to improve taxpayers' understanding of them and this is planned to continue. However, there are significant challenges in trying to prove intent[3] under the current law, as case law has shown. In choosing how to allocate resources, we recognise that the Commissioner of Inland Revenue's current audit strategy is based on assessing revenue risks to the tax system.

46. There are a number of options that could be employed in the context of reducing the attractiveness of rapid turnover of housing. Broadly, the choices (in increasing degree of impact) are:

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[2] In general terms, gains on sale are also taxable in the case of property development and subdivisions, and when the seller is in the business of dealing in land.

[3] Gathering evidence of intent is a particular challenge.

a. Further publicising the application of existing tax rules and increasing audit activity surrounding compliance with these rules;
b. Imposing disclosure requirements in respect of the sale of residential properties occurring within (say) two years of acquisition; and
c. Eliminating the residential land exemption for property sold within two years of acquisition (potentially coupled with the additional disclosure option above).

47. Option c in particular targets a different section of the housing market as it potentially brings into the net a greater proportion of quick one-off resales of owner-occupied housing.

48. More radical measures, such as the removal of the "intention of resale" test for residential property within a certain period, could also be contemplated, either for all property or a subset. Such a measure would be more likely to affect the overall housing market, but would also effectively result in a capital gains tax being imposed on properties held for a short period only.

Likely impact on the cycle

49. The first option - that of increased publicity and enforcement of existing rules - seeks to increase the visibility of the rules to taxpayers (about both the coverage of tax law in this area and about the consequences of non-compliance). Increased visibility and enforcement of existing rules could have a marginal dampening impact on speculative activity. However, in our assessment increasing effort to publicise and enforce existing provisions is, in isolation, likely to have only limited impact in reducing the upward pressure on property prices. We recognise that allocating more resources to this area, to take account of broader economic considerations, would be an explicit departure from Inland Revenue's current audit practice.

50. The additional step of imposing tax disclosure requirements4 for persons selling a property within two years of the date of acquisition of that property could be considered. It would further signal that these transactions may be reviewed by Inland Revenue. However, disclosure requirements in themselves may be of limited effectiveness as they only serve to complement enforcement activity in respect of transactions where a tax liability actually arises. Consequently, increased disclosure would have only a limited effect in relation to transactions to which an exemption from the rules currently applies.

51. Eliminating the exemption in respect of (owner occupied) residential land is likely to have a larger impact on housing demand (particularly if coupled with increased disclosure requirements) as a larger share of transactions would potentially be covered. It is also likely to have some negative impact on the supply of existing residential property for sale (the incentive is to delay sales beyond the two year window).

52. Ultimately, it is the net impact on supply and demand that will determine whether prices rise at a slower rate in the presence of any of these changes. On balance, we think there is likely to be a greater impact on demand, and therefore some dampening impact on

[4] Forms requiring disclosure of details such as: date of acquisition; date of sale; cost price; sale price; and reasons for selling.

price growth. However, it is difficult to quantify the magnitude of these effects, especially as it difficult to be precise about the materiality of speculative activity in total activity and how many transactions would be caught by any of these changes in practice. Our overall assessment, discussed in Section 1, is that the current housing cycle has largely been driven by macroeconomic fundamentals, with straightforward short-term speculative activity playing a secondary role in accentuating the pressures. More generally, our sense is that, even if the (owner-occupied) residential land exemption was removed, taxing speculative short-term gains in the housing market would be likely to play only a relatively limited role in dampening the amplitude of most housing cycles.

Other economic impacts

53. There would be some, albeit limited, efficiency costs with the introduction of either of options one or two above. In respect of option 1, introducing broader cyclical considerations into Inland Revenue's objectives would raise some issues (including managing risks of conflicting objectives) which would need to be worked through.

54. If a reporting requirement, such as that in option 2 was implemented, then each transaction would have to be analysed to see if the tax applied (involving increased compliance costs). Moreover, owners who do not want to declare their sale to Inland Revenue may defer sales of property in order to be outside of the two year period. These proposals would be likely to increase administration costs (Inland Revenue processing declarations; increased audit activity costs) while generating little additional revenue due to sellers giving "innocent" reasons for the sale or deferring sales if they think they cannot be explained. Furthermore, there could be efficiency costs if it meant that Inland Revenue had to undertake more auditing in this area than would be optimal under its normal audit strategy based on risks to the tax system.

55. There are likely to be relatively limited distributional impacts from increased enforcement of current property tax rules and/or the imposition of additional disclosure requirements. The relatively small numbers of people who engage in "true" short-term property speculation are likely to have more than the average level of wealth, although avoidance of the existing provisions may also be occurring at the less-visible lower end of the investment property market.

56. Eliminating the residential land exemption would be likely to generate extra tax revenues although this would not be the objective of the change. Keeping the "intention of resale" test should address equity issues in situations where taxpayers are required to sell their property within two years for genuine reasons (e.g. financial hardship; relocation abroad). Retaining this test would be at the expense of reduced effectiveness and greater complexity and taxpayer uncertainty.[5] Further, any two year (or other fixed-period) rule could result in lock-in effects until expiry of that period, artificially influencing supply decisions.

[5] Anecdotal evidence suggests that such exemptions served to undermine New Zealand's property speculation tax in the 1970s. One criticism that could be levelled at repealing the residential land exemption is that it is attempting to recreate a tax that did not work. This criticism is not wholly appropriate since, in staying close to the framework of existing law, enforcement should be less difficult and the approach and scope adopted would be consistent with that for all land transactions.

57. None of these measures would be likely to conflict with the Reserve Bank's financial stability objectives.

Implementation and long-term enforcement

58. Increased publicity about, and enforcement of, existing rules would be relatively simple to implement, although it could require some additional administrative resources and some modifications to Inland Revenue's objectives. Whether or not that would require any legislative changes has yet to be determined. Inland Revenue has expressed the view that any move to require the Commissioner to take account of broader objectives would lead to potentially conflicting objectives and have the unattractive feature of using the threat of audit to target particular taxpayers, not because the tax benefits of the audit are likely to outweigh the costs but to obtain wider economic objectives.

59. New reporting/disclosure requirements would require new legislation – although this could be a relatively minor legislative addition. Moreover, if Inland Revenue was to apply a stricter approach that, too, might need to be backed by amended legislation, given the body of existing precedents in case law.

60. Taking a further step to eliminate the exemption in relation to (owner-occupied) residential land would involve significantly more policy and legislative work than the first two options. There is a risk that introducing a measure of that scale rapidly would be seen as undermining the usual consultative approach supported in the Generic Tax Policy Process, and therefore any such changes should be seen primarily as relevant to future housing cycles. If removing the residential land exemption was widely perceived as introducing a capital gains tax then this could reduce the chances of successful passage of the legislation.

61. New Zealand's tax system relies heavily on voluntary compliance. A change such as that under option three might encounter strong taxpayer resistance. To ensure the long-term effectiveness of a new approach focused on short-term property transactions, it would be important to ensure that legislation was drawn sufficiently broadly to require reporting of any change in the economic interest in a property within two years of purchase, not simply outright purchases and sales. While feasible, this has the potential to significantly increase compliance and administration costs since taxpayers will seek to structure property transactions so as to fall outside any definition adopted.

Initial assessment

62. The goal of easing cyclical pressures in the housing market suggests there may be merit in encouraging Inland Revenue to consider taking broader cyclical considerations into account when determining the priority to be given to the enforcement of the existing law taxing gains on properties (other than those occupied by the owner) purchased with the intention of resale. This could involve some additional resources and some modifications to the objectives of Inland Revenue, possibly including legislative changes.

63. Our assessment is that increasing effort to publicise and enforce existing provisions is, in isolation, likely to have only limited impact in reducing the amplitude of property price cycles. Beyond this, we do not yet have a very good understanding of the role that

short-term speculative activity may have played in accentuating the recent housing cycle. That makes us cautious about proposing further measures at this stage, whether a milder option such as a reporting requirement on house sales, or more far-reaching ones such as eliminating the residential land exemption. A reporting requirement alone is likely to have little impact on the cyclical behaviour of house prices and would impose non-trivial compliance and administrative costs. Eliminating the residential land exemption could not be done quickly, given the commitment to normal consultative processes, and would, therefore, be unlikely to be relevant to the current cycle. It may also have only a small impact in muting most future house price cycles. If you wished to contemplate the option of further changes in this area of policy, our view is that further work would need to be undertaken to understand better the role of short-term speculative activity in accentuating house price cycles.

Section 3.2 Ring-fencing losses on investment properties

64. Tax data show a trend since 1994 of greater investment in loss-making properties[6]. Before 1994, most rental property investment appeared to generate taxable operating profits. Since 1994 there has been a greater propensity to invest in properties which produce tax losses. More individuals now report tax losses than tax profits from property investments[7].

Description

65. When the deductions that can be claimed on an investment property (primarily interest and depreciation) exceed the gross rents, the net loss is deductible against the investor's other income. This ability to deduct (known colloquially in respect of property investments as "negative gearing") is common for any investment that itself generates a loss for a taxpayer who has other taxable income.

66. Ring-fencing these losses would prevent an investor from realising a current tax benefit from rental property producing a loss. The net loss would be restricted to the rental activity and only be able to be carried forward to be utilised when the investment becomes profitable. Because the capital gain is not typically taxable (unless the property is explicitly purchased for resale), if a property remains heavily leveraged it may never produce a profit for tax purposes.

Likely impact on the cycle

67. The ability to deduct losses against other income is one of the elements of the package that make residential housing investment attractive to small investors. A house is one of the few assets, accessible to small investors, that banks will lend against at a high percentage of value. Large loans mean large interest payments that generate losses early in the life of the loan. Depreciation deductions are also large in the early period of owning rental property. These losses can then be offset against labour income, taxed at up to 39 per cent (there are few other ways to reduce tax on wages and salaries). The ability to deduct losses confers a timing benefit, which is of considerable value to liquidity-constrained investors.

68. The ability to deduct losses against other income is also attractive when the implicit objective of the investment is capital gain. In this case, the expectation would be that the capital gain (unlikely to be taxed) would exceed the operating loss.

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[6] Data from individuals reporting rental income and losses on form IR3 and on Loss Attributing Qualifying Companies (LAQCs) reporting losses and indicating rental activity. LAQCs are companies with few shareholders that are treated for tax purposes in effect like partnerships, in that company losses can be passed through to the individual shareholders who can offset them against their other income. While LAQCs are a popular form in which to hold investment properties, the perceived attractions of property investment are not dependent on their use. For this reason, any measures targeted specifically at LAQCs would be unlikely to have any effect on the housing market, and this section focuses on the more general option of ring-fencing operating losses on investment property which are currently being offset against income on other activities.

[7] Some investment in rental property also takes place through trusts. However, trust returns don't differentiate between business income and rental income, so it is difficult to know how much of the income is attributable to rental income rather than a business. Nevertheless, it is our sense that the individual record data probably understates the level of unprofitable rental activity since some of that is done by trusts.

69. Ring-fencing losses would reduce the actual and perceived attractiveness of residential property investment, particularly highly-leveraged investment in pursuit of capital gain. If the tax benefits are restricted, then the investor may recognise that the investment requires a higher net rental yield before being viable. This means the hurdle purchase price for a property with an expected rental return would be lower. This would tend to mitigate price appreciation for investment properties, at least in the short-term.

70. In the longer-term as rental yields adjust (rise) the housing market will become susceptible again to renewed bouts of cyclical price pressure. What is not clear is how effective ring-fencing might be in dampening these future cycles. Some countries ring-fence these losses, and others do not[8]. In principle, ring-fencing may act as a "dragging anchor", constraining the ability and/or willingness of some new entrants to get into the investment property market. This would help to dampen cycles. We are not aware of indications that the housing cycles in those countries which ring-fence have been any more muted than those in the smaller number of countries which allow losses to be offset against other income. On the other hand, individually held investment properties appear to play a larger part of the asset portfolios of New Zealanders than of asset portfolios of people in many other countries.

Other economic impacts

71. Ring-fencing would discriminate in an arbitrary way against a particular form of investment. Business activity (including rental property investment) commonly makes losses in its early stages. Losses incurred in one activity can be deducted against income from other activities as part of consolidating an individual's or firm's total income for tax purposes. As a general principle, consolidating losses is a sound practice.

72. Ring-fencing would bear more heavily on small liquidity-constrained investors relative to larger, more established, investors who also often have more complex investment portfolios. Many investors in residential rental housing are likely to have small and simple portfolios, so it is not clear that it would be viable or cost-effective for them to take advantage of the entities available to get around ring-fencing. Individuals or entities that are not particularly liquidity-constrained, and have large amounts of initial equity would not be very directly affected by ring-fencing itself, although by affecting marginal or smaller entrants to the market such a measure could reduce the prospects of capital gains for all purchasers of houses (investors and owner occupiers).

73. In theory, higher income groups are more likely to be adversely affected by the introduction of loss ring-fencing since they are more likely to own rental properties. In addition, the value of tax benefits to higher income earners is greater because they have a higher marginal tax rate. However, investors in lower income groups would also be affected. Previous experience with tracing rules (discussed below) is that the practical

[8] We understand the following countries have full or partial ring-fencing of losses from investment in residential property: Canada, France, Germany, Netherlands, Sweden, United States, United Kingdom. Australia, Japan, and New Zealand have no restrictions on negative gearing.

outcome is that the tracing approach 'bites' only with respect to taxpayers who do not know how to, or cannot, plan around these rules.

74. Limiting or denying interest deductions on money borrowed to invest in rental property would appear ad hoc when interest on money borrowed to invest in other assets (including tax preferred assets) is fully deductible. This departure from the existing broad tax strategy, if not managed, well could raise doubts about future changes to taxes more generally with some adverse effects on investment intentions.

75. Ring-fencing could impact on the supply of housing. In particular, if ring-fencing reduced overall investment in the housing stock it would tend to increase rental yields. Whether this increased nominal rents, which would particularly affect households and individuals on low incomes, where home ownership is lowest, would depend on the extent to which ring-fencing lowered house prices.

76. Financial stability objectives would not be compromised by the introduction of ring-fencing.

Implementation and long-term enforcement

77. New legislation would be required to introduce restrictions on ring-fencing.

78. A ring-fence would be hard to police. A range of legal entities is able to own a rental property. It would be complex to deny interest deductions for some of these entities, as they are able to create structures that make it difficult to match borrowing and interest payments to specific (rental housing) assets. For instance, a company can be set up to borrow money to buy a house. While the losses of the house may not be transferable, the losses of the company that owns the house may be depending on how the ring-fence is designed. Particular issues would arise with entities that owned a mixture of housing and other assets, with loans secured over the combined assets. It would be necessary to identify (trace) particular financial flows arising from property, to be given different treatment to other flows. As noted above, the most sophisticated investors would be best placed to overcome the ring-fence.

79. New Zealand has had previous experience with tracing rules. The principal example was the loss offset rule that applied prior to the 1991 income year in relation to taxpayers carrying on a specified activity. The definition of specified activity initially applied to a wide range of agricultural and horticultural activities, including land held to derive rents. The rule limited the amount of loss from such activities that could be offset against income from other sources to $10,000 in any one year, with any remaining losses having to be carried forward to the next year and sequenced when losses were on-going. An associated rule clawed back previous deductions for interest and development expenditure. These rules were not perceived as a having a significant practical effect.

Initial Assessment

80. Ring-fencing losses available on rental housing could have some impact on the cyclical movement in house prices by reducing the demand for these properties by investors with initial low levels of capital, and hence affecting expectations of other participants

in the market. The magnitude of that impact would depend on the materiality of this group to the overall market. Ring-fencing would also reduce the medium-term attractiveness of investment in rental housing, and could end up raising rentals, affecting lower income groups more heavily. While there are New Zealand and international precedents for ring-fencing there is little evidence that house price cycles have been less marked in countries with ring-fencing provisions in place.

Section 3.3 Easing regulatory constraints to improve housing supply

81. In well-functioning markets, when prices rise, supply increases, and then prices stop rising and sometimes even fall. Factors influencing the response of supply therefore help determine whether the observed increased demand for housing translates primarily into changing prices or quantities. In particular, if the housing stock can expand readily as demand rises then the corresponding increase in house prices should be relatively modest. Improvements in this area could, therefore, help achieve dampen house price cycles and improve the affordability of housing.

Description

82. Over the past 25 years land prices across New Zealand have increased twice as fast as house prices, which acts as a constraint on new housing. Recent research indicates that the cost of land relative to materials and labour used in house construction has been an important cause of rising house prices over the last 25 years. The reasons for the rise in land values are not well understood, although there is evidence to show that in regions where new housing has been less responsive to rising population land prices have intended to increase more rapidly.

83. More generally, little research has been done in New Zealand on the relative contribution of determinants like the availability and cost of land, developers' holding costs, construction and labour costs, time taken to gain resource consents, and other regulatory issues related to the supply of housing. Overseas evidence suggests supply issues can have an important influence on the house price cycle. To address this a number of projects are currently underway within the Department of Building and Housing and Housing New Zealand Corporation that examine the regulatory and other factors affecting housing supply and affordability in more detail.

Impact on the cycle

84. To the extent that house price supply responds more quickly to cyclical changes in housing demand, more of the market adjustment will take place through new construction, or additions and alterations to existing housing, than through higher prices for existing dwellings. Lower house price appreciation would reduce the impact of the wealth and credit channels on private consumption spending, albeit at the expense of extra pressure on the construction sector (and, hence, overall resources). Overall, we would expect that a more responsive housing supply would reduce, to some extent, the cyclical pressure on monetary policy. How much depends largely on the extent to which current housing supply is inhibited.

Other economic impacts

85. Increased supply capacity would be likely to have positive distributional impacts. Through reducing the extent to which house prices rise in response to increased demand, housing affordability would be increased. This would benefit low income households and first home buyers.

86. Financial stability objectives would not be compromised and any policies that allowed supply to respond more readily to demand for housing would be consistent with the overall direction of wider economic policy.

Implementation and long-term enforcement

87. There are likely to be significant lags in implementing any changes to policy (or application of policy) currently impeding supply. Further work is needed to identify current impediments, and the reasons why they might originally have been put in place. It would also take considerable time to implement any changes identified across a large number of disparate authorities. This means that measures in this area will be helpful mainly in mitigating price pressures in future housing cycles.

Initial Assessment

88. Work in this area appears promising, offering possible benefits across a number of fronts over the longer-term. Officials have already commissioned some work and we think there could be merit in further assessment of the extent to which policies which restrain supply, particularly of land, have led to more accentuated cycles in house prices. If sensible changes could be identified and implemented there should not be material long-term enforcement problems, given that measures in this area would be designed to make markets more responsive to demand, rather than attempting to constrain directly the behaviour of any firms, households or lenders.

Section 3.4 Linking bank capital requirement more closely to risk

89. Under Part V of the Reserve Bank of New Zealand Act, the Reserve Bank sets capital requirements for banks. The Bank can use prudential powers in such a way as to provide countercyclical macroeconomic benefits, provided that the powers are being used primarily for prudential objectives[9] and that the proposed use of those powers will be effective for that purpose. Existing capital requirements are only weakly linked to the risk on particular loans, and not at all to wider economic risks. Capital requirements that were better attuned to risk might influence lending behaviour in a way that provided countercyclical benefits.

Description

90. The Reserve Bank is in the process of implementing the new international Basel II framework for assessing bank regulatory capital. A fundamental principle of Basel II is that regulatory capital requirements should be sensitive to risk, including, in principle, risks associated with the business cycle. Where there is a positive correlation of such risks with the business cycle, prudential measures implemented as part of Basel II could provide "automatic" benefits for the management of the business cycle.

91. Under Basel II, supervisors are expected to set fixed risk weights only for banks applying the Standardised approach (in New Zealand's case, the smaller banks). We expect that capital requirements for these banks will be made more sensitive to a range of measures of risk to the bank (such as the loan to value ratio (LVR) on loans secured against residential property, concentration of exposure to loans secured against residential property, or subclasses of such loans) and of risk to the financial system (such as indicators of the business cycle or of the housing market cycle).

92. Banks applying the internal ratings based (IRB) approaches for capital adequacy purposes will have their capital requirements determined by bank models. These models will have to be accredited by supervisory authorities; in our case, the Reserve Bank. Thus, for example, any accredited IRB model should take account of LVR if it is a good indicator of risk and all else equal, the capital requirement for high LVR mortgages will be higher than for low LVR mortgages.

93. The work on Basel II will include considering whether other indicators of the riskiness of a loan should be incorporated into the capital framework. This could be augmented by assessing whether an explicit link should also be made to the overall state of the economic cycle; that is, increasing capital requirements in the upswing, when capital tends to be cheaper and banks may relax lending standards, to provide a better buffer to cope with inevitable downturns.

94. More immediately, at present New Zealand's existing capital adequacy requirement is unusual in that it imposes no additional capital requirement for housing mortgages with high initial LVR s, even though there is good evidence that, on average, higher LVR loans are riskier. It would be relatively straightforward to modify the existing

[9] Section 68 specifies the range of possible prudential objectives: (a) promoting the maintenance of a sound and efficient financial system; or (b) avoiding significant damage to the financial system that could result from the failure of a registered bank.

requirements, and not inconsistent with the likely direction in which the regime will be heading as Basel II is implemented. The simplest option, for the transitional period until the Basel II regime is implemented, would be to adopt the Australian rules, under which there is a higher capital requirement on mortgages with an LVR in excess of 80 per cent, and not covered by mortgage insurance.

Likely impact on the cycle

95. Increasing regulatory capital requirements, other things being equal, increases the ability of banks to withstand periods of financial stress (the primary purpose). However, the link between regulatory capital requirements and the quantity and price of bank loans in particular markets is neither direct nor precise.

96. Banks are not currently firmly constrained by regulatory capital requirements, because they are able to, and typically do, hold capital well in excess of the current requirements. For example, the large retail banks in New Zealand hold "Tier 1" capital of around 8 per cent of risk-weighted assets, against the current regulatory requirement of 4 per cent (TSB holds about 15 per cent).

97. The more firmly binding constraints on banks' capital management currently appear to be the external credit ratings that banks aim to achieve and maintain. These ratings are used for marketing and funding purposes, particularly in the wholesale funding markets. Banks find it in their economic interest to maintain credit ratings that imply capital holdings well in excess of current regulatory minima. There is, of course, an interaction between the two factors, in that rating agencies factor regulatory capital requirements into their own assessments.

98. The additional capital that banks generally hold above current regulatory minima means that even fairly substantial changes to those minima might not have more than an indirect and muted effect on lending practices. The minima would have to be raised towards the levels maintained by banks (i.e. around 8 per cent for the large banks) in order for changes in them to begin to affect the quantity or price of lending directly (and even that assumes that capital is more costly than debt financing, which is a debated proposition in the literature).

99. If regulatory capital minima were binding (e.g. if they were raised nearer to the 8 percent currently held), an increase in the risk sensitivity of capital requirements would mean that banks would be inclined to favour lower-LVR loans, which would be beneficially countercyclical. However, there is potentially a competing effect. If banks marked to market housing collateral on existing loans, a rising housing market would lead to a fall in measured LVR on existing loans, and thus to a fall in the capital requirement on existing loans – releasing capital that could be used to support further lending.

100. Measured credit risk tends to fall during an upswing and rise during a downswing. The designers of Basel II have sought to remove as much procyclicality from the regulatory system as possible; for example by stating that credit risk parameter estimates for the IRB approaches must be "through the cycle" estimates. Supervisors are concerned to ensure that prudential settings should (a) be stable through the cycle and (b) not contribute to the cycle. Basel II contains guidance on possible supervisory remedies for

procyclicality, including using the accreditation and supervisory review (Pillar 2) processes to ensure that credit risk parameter estimates produced by banks are true through-the-cycle estimates, and that banks hold capital at stable levels above any cyclical peaks in regulatory minima due to residual cyclicality. We will be exploring these remedies thoroughly as part of the Basel II process. However, avoiding pro-cyclical effects is likely to be quite challenging, let alone successfully calibrating the regime to enable it to substantially counteract other sources of cyclicality.

101. Overall, making capital requirements more sensitive to measures such as LVRs or to the wider economic cycle may have some effect in dampening the cycle, but the effect is likely to be quite limited and difficult to anticipate reliably. Bank lending practices already take some account of the extra risk from high LVR lending through the use of risk mitigants such as lenders' mortgage insurance. It would be particularly difficult to envisage any material countercyclical benefits from, say, the adoption of the Australian treatment of mortgages during the transition to Basel II. The recent Australian housing cycle was both large and prolonged.

Other economic impacts

102. Regulatory measures to influence bank lending may affect the composition of loan portfolios. Regulations to restrict or make more costly the extension of certain classes of loans would tend to shift the distribution of lending towards the other classes of assets. If, for example, restrictions were placed on loans with high LVRs, lending growth at the margin might be "pushed" into the other categories of lending. The most likely categories where lending could be pushed might be corporate lending and unsecured personal lending (given that much SME lending already appears to be secured on proprietors' dwellings).

103. Overall, however, since powers exercised under the Reserve Bank Act must be exercised primarily in pursuit of financial stability objectives, and as any modification of the capital framework would be designed to reflect the overall risk associated with particular types of credit, there should not be any material adverse consequences for financial stability.

104. Modifying the regulatory capital requirements to better align them with the risk associated with particular types of lending would be likely to lead to higher capital requirements on loans to marginal borrowers. In the owner-occupied sector of the housing market, these borrowers would be likely to be concentrated among the relatively lower income sectors, and among first home buyers. Note, however, the goal of the measure would be to ensure that capital requirements broadly reflect the riskiness of that class of lending, not to penalise banks for undertaking such business (or borrowers for taking such loans).

Implementation and long-term enforcement

105. The Act specifies procedural requirements for the exercise of Part V powers that vary depending on the particular power. There are certain "bare minimum" statutory requirements regarding consultation periods for some powers (e.g. the imposition of a condition of registration), but these are much shorter than those adopted in practice.

106. For most substantive prudential proposals, the Reserve Bank generally provides a minimum consultation period of two or three months. The timing constraints on the particular proposals considered here are discussed below.

107. LVR-linked capital requirements, as part of the current capital regime, could be imposed via condition of registration. Consultation could be done at relatively short notice (i.e. a few weeks or months). However, it would take some time (perhaps a few months) for banks to make the necessary system changes to accommodate the changes to the capital adequacy rules. Even though such changes could be implemented relatively quickly, resource constraints mean that doing so could pose some risk of delaying work on the longer-term changes under Basel II (which have more potential to provide real financial stability gains - and probably have more counter-cyclical ancillary benefits to offer too).

108. Capital requirements linked to other cyclical indicators would take longer to implement given their novel nature and the consequent empirical work and consultation that would be required on the magnitude and dynamics of cyclical risk in New Zealand. The Basel II regime itself will be implemented in New Zealand over the next couple of years.

109. It is important to stress that the current Part V powers relate to registered banks only, registration is not compulsory, and there exists a sizeable non-bank financial industry providing similar products to banks, including loans secured against residential property. Banking controls can also generally be avoided by offshore institutions. There is thus a ready means for both borrowers or lenders to evade measures imposed under Part V, if they threatened to lead to actual costly changes in behaviour. This could limit the period of effectiveness of any new measures that are viewed as onerous.

110. If evasion or disintermediation happened on a relatively large scale, economic resources would be wasted, at a cost to economic efficiency. However, as with most of the measures considered in this report, these costs would appear unlikely to be large.

111. Although the Reserve Bank's powers to regulate financial activity may change with the reform to the framework for supervision of non-bank financial institutions, there would still be scope for disintermediation beyond the reach of the regulatory net. It is difficult to construct a watertight and administratively efficient barrier around financial activity. This would an especially important issue here, as the explicit focus of the measures taken would be required, given current law, to focus on the health and soundness of the financial system.

112. Linking capital requirements to LVR is common internationally[10], so is unlikely to create adverse reputational effects. Indeed, the signalling benefits may be positive, in that an increased focus by the Reserve Bank on high LVR lending now would put banks

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[10] Many countries currently impose an LVR threshold on capital requirements, whereby any mortgage with an LVR under the threshold is assigned a risk weighting of 50 per cent in accordance with Basel I, and any mortgage with an LVR over the threshold is assigned a higher risk weight. The thresholds and higher risk weights vary between countries. For example:

- Australia: 100 per cent risk weight for entire loan if LVR ≥ 80 per cent, unless the loan is 100 per cent insured, in which case the risk weight remains at 50 per cent.
- USA: 100 per cent risk weight for entire loan if LVR ≥ 90 per cent.
- Germany: 100 per cent risk weight for the portion of a loan that is above a 60 per cent LVR.

on notice that our implementation of Basel II is likely to include attention to high LVR or risky lending. There may, of course, be other means of achieving that goal.

113. There is no precedent for linking capital requirements to other indicators of risk that vary positively with the cycle. However, as discussed above many supervisors are currently considering whether Basel II would risk promoting cyclicality in bank lending and, if so, how best to implement the system in a way that would counteract this tendency.

Initial Assessment

114. The shift to the Basel II regime offers a good opportunity, on financial stability grounds, to ensure that capital requirements are better tailored to risk. This is a promising direction, which should leave the banking system better positioned to cope with inevitable future downturns. It is less clear, however, quite how material any ancillary benefits in dampening cyclical upswings might be. It should also be noted that, at present, the Reserve Bank's powers over capital adequacy apply only to registered banks, so that disintermediation could be a serious concern if a modified capital requirement had any material impact on new housing lending by banks.

115. Modifying the existing capital adequacy regime now, in the transition period to Basel II, to impose an additional requirement on high LVR loans would be both internationally conventional, and something that could be done quite quickly within the Reserve Bank's existing powers. It would clearly signal to banks the importance the Reserve Bank will be placing on these risk issues in implementing Basel II. However, most of the banks already take insurance on high LVR loans, and the overall impact of any modification to Basel I would be likely to be marginal. Certainly, such a regime in Australia, and various other countries, has not prevented marked housing cycles. We would, therefore, be hesitant about proposing such modifications at this stage.

Section 3.5 Discretionary limit on loan to value ratio

116. A common feature of credit and asset price cycles is that lenders become willing to lend an increasing share of the value of an asset as asset values increase. This behaviour can accentuate the cycle itself, and any associated spillover into general demand and economic activity. A cap on the loan to value ratio applying to any residential property, imposed in periods of particular stress in the housing market, might act as a circuit-breaker, by impinging very directly on some buyers.

Description

117. The features of such a comprehensive, but discretionary, limit would be as follows:

- Would apply to all new loans (or refinancings) secured by means of mortgage security on residential property (where residential use is the predominant use of the property).
- Each new lender would be required to verify that its loan would not take total outstandings on the property above the loan to value ratio limit.
- Valuations used would be the relevant QVNZ rateable value, and to avoid big discontinuities these would be rated forward using the quarterly QVNZ index for the relevant region or sub-region.
- The power to apply such a limit would be established by statute, and could be invoked by the Reserve Bank.
- The Reserve Bank could invoke the power having regard to statutory considerations such as whether the housing market was, or was likely to become, materially overvalued, overall pressures on resources, and whether the OCR had already been set at a level it judged to be contractionary.
- The Reserve Bank would be required to issue an additional *Monetary Policy Statement* (or the like) within, say, seven days of invoking the LVR limit, fully articulating the reasons why the power had been invoked, against the criteria outlined in statute.
- The limit would be removed, or raised to an unconstraining level, when the Bank considered that those conditions no longer existed.

Likely impact on the cycle

118. A review of past New Zealand housing cycles suggests that such an instrument might, usefully, have been imposed between two and four times in the last 40 years, for periods of perhaps two to three years at a time. However, it is important to note that this is apparent with the benefit of hindsight. Our review of past cycles suggests that the Reserve Bank has not been particularly good at recognising developing imbalances in advance. If that pattern continued - and it is fairly common among all (private and official) forecasters - the loan to value limit might most often be imposed only very late in the cycle, reducing the benefits such an instrument might have offered in a world in which the Bank had perfect foresight. For example, in late 2004 the Reserve Bank had reached the judgement that the worst of the housing cycle had passed, only to be surprised by a further sharp rise in prices in 2005. In that environment, it is unlikely that the LVR limit would have been utilised before around the OCR increase of March 2005.

119. Our assessment is that such a limit would be likely to have a material impact on the housing credit cycle (subject to the discussion below regarding long-term enforcement issues). While it would not directly affect most borrowers at all, it would materially affect some quite directly, and by operating on these marginal participants could be expected to affect overall credit growth, and hence house price inflation and associated wealth-related effects on consumption. If so, the OCR would be able to be set lower than in the absence of the limit.

120. How much lower would depend in part on the responsive of non-housing credit (which would be cheaper than otherwise, to the extent that the OCR was lower than otherwise). The instrument would, therefore, be most useful when credit demand was heavily concentrated around the housing market itself, and relatively less useful when the strength of credit demand was broadly-based.

121. Once such legislation was enacted it would be a factor in decision making in all future housing cycles. Specifically, one might expect to see some borrowing and house purchases brought forward (perhaps irrationally so) to avoid being caught if and when the LVR limit power was invoked. Those marketing mortgages could be expected to play on the fear of the instrument being used, well before the Reserve Bank might otherwise be seriously considering invoking it.

Other economic impacts

122. Housing mortgage loans are widely used at present by owners of small businesses to provide finance for their businesses. Because it is considerably easier to identify reliably the collateral underpinning a loan than the purpose for which the credit is being taken, a limit of this sort would have to apply to all loans secured on residential property (including, incidentally, non-housing loans covered by the provisions of all-obligations mortgage document). Accordingly, one of the drawbacks of the scheme is that it would directly affect the availability of finance to some businesses, at a period when the exporters (or import competers) among them were already facing considerable pressure from the high exchange rate. Of course, this constraint would apply only to the relatively highly-indebted minority of borrowers.

123. The loan to value ratio limit would apply exclusively at the point at which the loan was made (or refinanced). On occasions, high income or relatively wealthy people will take loans with high loan to value ratios. Nonetheless, it is reasonably clear that such a limit would most directly impinge on first-home buyers and, among them, would most affect relatively low income buyers (who not only typically have high loan to value ratios, but have fewest options to choose a slightly cheaper house which they could finance with less debt). The measure would be likely to directly affect relatively few people trading up, and only a minority of those buying investment properties (many of whom are able to spread borrowings across an owner-occupied property, in which most will have material equity, as well as the investment property itself). Given the longer-term social and political interest in promoting home ownership, the asymmetric burden of such a limit is an unattractive feature[11], especially as there is no particular reason to believe that the demands of first home owners have disproportionately exacerbated the current

[11] Although note that this limit would be imposed only in periods when the housing market was likely to be materially overvalued, and many of those affected might find it in their own longer-term financial interests to delay a house purchase for a few years.

housing cycle. This might also make it hard to defend such a measure as the best response to excess demand pressures.

124. Use of a direct control of this sort as a supplementary stabilisation instrument, relying on a non-price direct constraint on the ability of people to contract, would have greater efficiency costs than using incentive-based measures to influence behaviour. Avoidance efforts, and countervailing monitoring and compliance activities involve real economic costs. However, on balance, we think that efficiency costs from imposing such a limit are likely to be moderate, given that the limit is likely to be in place only for a few years at a time, would affect directly only a minority of borrowers, and is imposed only when costly imbalances are already establishing themselves in the wider economy.

125. The limit would prevent traditional lenders from making some loans that microeconomic assessments of risks might have led them to approve, and in this sense might reduce financial sector risks. However, because the limit would be set on macroeconomic grounds (rather than an assessment of an actual risk of the credit) such an instrument might encourage banks to focus lending efforts in other, less familiar, markets not affected by this limit. If so, there could be some offsetting increase in balance sheet risks. We would not wish to overstate this risk, and the key consideration in avoiding a conflict with financial stability goals is likely to be ensuring that the enforcement regime was relatively effective and did not allow widespread disintermediation of housing mortgage business to non-core lenders.

Implementation and long-term enforcement

126. An LVR limit of this sort would require new legislative powers. It could not be implemented under the existing provisions of the Reserve Bank of New Zealand Act because (a) those powers must be used for promoting a sound and efficient financial system (and hence cannot be used primarily for cyclical management) and because (b) the Reserve Bank's regulatory powers apply only to registered banks, and the restriction would need to apply to all lenders, not just registered banks, if it was to be effective.

127. The long-term effectiveness of a scheme of this sort would depend substantially on the ability of legislative drafters to cast the net sufficiently broadly to keep avoidance and disintermediation possibilities to an acceptable minimum (the realistic aim for almost any regulatory control).

128. For example, if residential mortgages could be registered by offshore providers (say, the parents of New Zealand banks) those mortgage providers would be beyond the reach of New Zealand legislation designed to limit total LVRs. Closing that option seems unlikely to impinge on very much housing finance currently being undertaken with offshore lenders. However, such a restriction could still be inconsistent with existing treaty commitments not to discriminate against non-resident providers, including those under the General Agreement on Trade in Services[12], and with the government's commitment to a Single Economic Market with Australia. If you wish to pursue this

[12] Under this agreement there is an exception for prudential measures, but measures undertaken with a explicit cyclical management focus would appear unlikely to be covered by this exception. There are also exceptions for short-term measures taken for exchange rate and balance of payments stabilisation reasons.

option any further this would be one of the issues on which we would seek more detailed legal advice.

129. A major challenge would be to cast the net sufficiently broadly to capture ongoing attempts to establish effective economic collateral over a house or residential property without using a mortgage security[13]. In principle, legislation could be drafted sufficiently broadly but the scope of the limit would also have to be defined to include any financing structure where the lender relied on an economic interest in a residential property, including any loan to a company where the predominant activity of the company was to own residential property. Over time, of course, the effectiveness of such drafting would depend on judicial interpretations and the evolution of case law.

130. Because neither borrowers nor lenders would have an interest in disclosing non-compliance with this limit, it would be necessary for the Reserve Bank to establish a reasonably intensive monitoring and compliance operation in those (relatively small numbers of) years when the LVR limit was actually in place.

131. The LVR limit would be invoked on a discretionary basis by the Reserve Bank. Given that this limit imposes more direct constraints on the freedom to contract (than, say, the OCR, which is an incentive-based system) proposals to vest such power in the Reserve Bank might well fresh concerns about the single decision maker structure and the power placed in the hands of a single official.

132. We do not, at present, have the data that would enable us to reach firm conclusions on the appropriate level of any LVR limit. As noted earlier in the paper, international limits of around 80 per cent are not uncommon, but these are imposed for rather different reasons, and often provide for exemptions if mortgage insurance is taken. If you wish to consider further such a limit we would approach banks to provide us with detailed data on the pattern of loans made in recent years, which would enable us to recommend an appropriate level for such a limit, which would be designed to affect housing finance activity at the margin.

133. There is no international precedent for such a formalised discretionary use of an LVR limit. It is clear that the whole question of how central banks and regulatory authorities should respond in the second-best world of overshooting asset prices, which often spill over into sustained domestic demand pressures, will not go away. Moreover, unease about the larger moves in exchange rates, especially those associated with cycles in domestic demand and monetary policy, also seem set to be an enduring feature of market economies. Notwithstanding this, such an instrument would be likely to be received rather sceptically by markets and by international agencies and commentators, and would take some considerable time to establish credibility.

[13] Note that one attraction of a mortgage structure is that registration of a mortgage (itself not compulsory) establishes a lender's priority in the queue of claimants in the event of a default.

Initial Assessment

134. A comprehensive loan to value ratio limit of the sort discussed here could be operated reasonably effectively, although not without material ongoing implementation and enforcement costs. However, it is a poorly targeted instrument which would directly affect mainly first home buyers and relatively low income home buyers (typically those who have, and need, the greatest degree of leverage). By contrast, it would affect only indirectly the much larger pool of people who are trading up to a larger/better house, or simply using some of the equity in an existing home to finance either consumption spending or a move into an investment property. The difficulties in recognising periods of intense pressure in the housing market sufficiently early to capture the full benefits of such a tool, and possible difficulties in preventing disintermediation to offshore providers, reinforce our unease about an option of this sort.

Section 3.6 Mortgage interest levy

135. The relatively high domestic wholesale interest rates needed to counter domestic inflation pressures (at a time when interest rates in many other countries are relatively low) have played a material role in the marked and sustained appreciation in the exchange rate. If a wedge could be established between the interest rates paid by domestic borrowers and those available to foreign savers, the required degree of overall restraint on demand might be able to be achieved with less upward pressure on the exchange rate and, as a result, less spillover pressure onto the tradables sector of the economy. A mortgage interest levy might enable such a wedge to be established, at least as regards a significant portion of total lending[14].

Description

136. The key features of such a levy would be as follows:

- Would apply to all loans outstanding, by all lenders, secured using mortgages on residential property (subject to a "predominant use" test)[15].
- Would be levied on the borrower, but with an obligation on the lender to collect the levy.
- Would be expressed as a set number of basis points per annum, levied on all residential mortgage loans outstanding[16].
- The power to apply such a levy would be established by statute
- The power could be invoked having regard to various statutory criteria, such as whether the housing market was, or was likely to become, materially overvalued, the overall degree of pressure on resources, the size of the gap between New Zealand and key foreign interest rates, and whether the OCR had already been set at a contractionary level.
- Within seven days of the power being invoked the Reserve Bank would be required to issue an additional *Monetary Policy Statement* (or the like) fully articulating the reasons why the power had been invoked, against the criteria outlined in statute.
- The levy would be removed when the conditions warranting the imposition of the tax no longer existed.
- The actual levy rate would be determined at the time, but should probably be subject to a statutory cap (perhaps 200 basis points).

137. The instrument could also be applied in reverse (as a subsidy) at periods when the housing market was particularly weak, subject to the same accountability requirements17. This option is not developed further in the report at this stage.

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[14] We considered, but quickly discounted, the options of a levy on all credit or on bank funding. In either case, such measures would be likely to prompt a large scale relocation offshore of much New Zealand banking business. The retail nature of residential mortgage lending, and its tie to specific property titles, makes it more feasible to ring-fence mortgage lending, but see further discussion of this issue below.

[15] These would have to include non-housing loans covered by the common all-obligations mortgage documents, under which any amounts owed by the customer to the bank (including, for example, credit card outstandings) are covered by the residential mortgage security.

[16] We also considered an option under which the levy rate would vary according to the fixed interest rate period (with a view to raising fixed mortgage rates to around the (OCR-driven) floating rate. Such a regime would be more complex to apply, and is not necessary to drive a wedge between lending and borrowing rates.

138. The mortgage interest levy would, to some extent, substitute for the OCR. In other words, if the levy was in place the OCR would be able to be set a little lower than otherwise. An important difference from the OCR is that a mortgage interest levy redistributes incomes from (some) borrowers to the government, whereas adjusting a market interest rate redistributes income between borrowers and savers (foreign and domestic).

Likely impact on the cycle

139. The circumstances in which the mortgage interest levy would have been applied would be similar to those under which a loan to value ratio limit might have been used, but would be subject to an additional consideration (the extent to which New Zealand's interest rate cycle was out of step with that in other significant economies).

140. If the levy was effective (ie the lower OCR meant reduced upward pressure on the exchange rate), overall mortgage interest rates would be a little higher than otherwise to achieve the desired degree of overall disinflationary pressure. This would better align the impact of policy with the (housing credit related) source of the demand pressures. However, because the mortgage interest levy would raise the relative price of housing lending (and could lead to non-housing (including corporate) lending being cheaper than otherwise) it would be most likely to be effective when credit growth is heavily concentrated on housing lending. The more strongly corporate (and other non-housing) credit responded to the lower cost of such credit, the less overall impact on the cycle the instrument would have.

141. It is harder to tell what impact the levy would have on wholesale term interest rates. Yields on interest rate swaps for, say, two and three year terms have been instrumental in attracting retail investment in eurokiwi and uridashi bonds. Term interest rates embody implicit expectations about future levels of the OCR, so wholesale markets could be expected to factor in the probability of the mortgage levy being used rather than, say, further OCR rises, reducing the attractiveness of those New Zealand dollar instruments to offshore investors. However, because markets would recognise that the levy could be imposed, that expectation might hold interest rate swap yields (and hence fixed mortgage rates) lower than otherwise in the early stages of a cycle (especially if the Bank did not succeed in establishing an expectation that the instrument would be used only in fairly extreme circumstances). The tendency of borrowers to focus on the lowest mortgage rate on offer, regardless of term, suggests this would not cause undue problems.

142. Other behavioural changes in anticipation of the levy would probably be an issue for this instrument too. However, there is less risk of borrowing being brought forward (in the way discussed when we considered a LVR limit) because there are no sharp discontinuities involved (the levy would apply to all outstanding loans, taken before or after it was invoked).

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[17] Consistent with this, revenue raised from the levy might be held in a dedicated fund, so that it was clearly seen as a cyclical management tool rather than as a revenue-raising device.

Other economic impacts

143. One of the more attractive features of the mortgage levy proposal is that it is a price-based mechanism. As such, it does not interfere with anyone's ability to contract.

144. The levy would be felt by all mortgage borrowers, for whom the cost of mortgage credit would be a little higher than otherwise. Among mortgage borrowers, the impact would be greatest on those with the largest mortgages relative to their underlying income and wealth (that is, typically, low income purchasers and new entrants to the housing market). The larger impact would probably be on savers, domestic and foreign, for whom returns would be lower than otherwise. In terms of behavioural change, we would expect the biggest impact to be on the most interest-sensitive supply of funds. In recent years, that has been foreign savers, in a range of different instruments. Because yields on New Zealand dollar securities would no longer be as high, some of those funds would no longer seek out New Zealand dollar investment opportunities, and at the margin would experience a loss of income. Because the exchange rate cycles would be likely to be somewhat more muted, especially at peaks, New Zealand producers would be advantaged at the expense of New Zealand consumers (who, in the first instance, benefit from overvalued exchange rates).

145. A mortgage interest levy would be a significant departure from the current approach to economic management. In some respects - putting a wedge between mortgage borrowing rates and those available to external suppliers of funds - that would be the point of the instrument. However, it would also represent a departure in that it would favour non-housing borrowers over those using residential property as security (for reasons other than underlying risks), and might, at the margin, be seen to run counter to the thrust of measures designed to encourage domestic savings. That conflict should not be overstated, because if the measure were to be effective in reducing exchange rate overshoots at cyclical peaks it could also be expected to raise net national savings at those points of the cycle.

146. Small business finance covered by residential mortgage security would be subject to the mortgage levy. To the extent that mortgage interest rates are higher than in the absence of this levy it might cut across other aspects of policy designed to encourage small and medium enterprises. However, this should be less of an issue than for a loan to value limit because the levy does not directly constrain access to credit. It would tend to raise the cost of mortgage-based credit relative to other forms of credit. However, as small business owners typically use mortgage finance because it is substantially cheaper than other forms of credit (and may be the only available form for many), and because mortgage rates are unlikely to be very much higher than in the absence of the mortgage interest levy, this is unlikely to be a major constraint.

147. There is no obvious or very significant conflict between a mortgage levy of this sort, established for cyclical management reasons, and longer-term financial stability objectives, provided that the enforcement regime was relatively effective and did not allow widespread disintermediation to non-core lenders.

148. Avoidance efforts, and countervailing monitoring and compliance activities involve real economic costs and tax planning activity would be likely to increase. Overall, however, efficiency costs from imposing such a limit seem likely to be moderate, given the price-

based nature of the instrument, the likelihood that the limit would be in place only for a few years at a time, and would be imposed only when costly imbalances are already establishing themselves in the wider economy.

Implementation and long-term enforcement

149. The provision for such a levy would have to be established in legislation.

150. An instrument of this sort would be inconsistent with the longstanding general principle that taxes cannot be imposed without the explicit involvement of Parliament. As it is not central to the economics of the levy, we have deliberately not sought to resolve the question of who would have the authority to trigger (and later remove) the levy, but the most plausible options are either the Minister of Finance on the recommendation of the Reserve Bank, or the Reserve Bank itself. Both present challenges to the existing approach. Giving the authority to the Reserve Bank would have some economic appeal (as the instrument is established as a complement to the existing OCR instrument) but this would raise further questions about the degree of power exercised by officials, even if stringent accountability requirements were put in place. On the other hand, given that the OCR and the levy would to some extent be substitutable options, involving the Minister of Finance directly in the process, would draw the Minister (and The Treasury) more closely into routine deliberations regarding the conduct of monetary policy. At the margins, this might tend to undermine the operational autonomy of the Reserve Bank in monetary policy, and compromise the ability of the Minister (and his advisers) to fulfil the governance and performance monitoring role they play under the current legislative framework.

151. Legislation to implement a mortgage interest levy would require rather careful drafting to minimise avoidance opportunities. The issues here are very similar to those for the loan to value ratio limit discussed earlier, and would require constant vigilance to ensure that the impact of new avoidance techniques was kept to a minimum.

152. For such a levy to be effective, it would be important to ensure that significant proportions of New Zealand dollar mortgage lending did not come to be conducted by offshore providers (including, possibly, the parents of New Zealand banks), beyond the New Zealand tax net. Disintermediation offshore is more of a concern than for the loan to value limit option because the mortgage interest levy would affect all residential mortgages outstanding (not just a minority of new mortgages). These concerns could be met if law was changed to require that anyone registering a mortgage in New Zealand must be registered in New Zealand for tax purposes. We do not believe that such a restriction would impose material obstacles to genuine underlying business currently being conducted, although further consultation could modify that judgement. Existing treaty commitments, and commitment to a Single Economic Market with Australia, may also be an issue here, although these might be less of an issue for the mortgage interest levy (given that it would require simply an obligation to register for tax purposes). We would seek more detailed legal advice on this matter if you wish to explore the mortgage levy option any further.

153. The scope of the tax base would have to be defined to include any financing structure where the lender relied on an economic interest in a residential property, including any loan to a company where the predominant activity of the company was to own

residential property. Doing so in a way that the courts can interpret it sensibly is likely to be a challenge given that tax law has tended to take a (legal) form over (economic) substance approach.

154. Over time, of course, the effectiveness of such drafting would depend on judicial interpretations and the evolution of case law (there are parallels here to general tax law). In principle, monitoring of compliance should be considerably easier than for a loan to value limit because the IRD has established methodologies and monitoring and compliance structures that are in place through all stages of the economic cycle.

155. Ensuring that all advances secured by an economic interest in a house were caught would be a continuing challenge. However, we have assumed that there would be relatively little scope for lending to households to migrate from secured to unsecured forms. For most households, if a material amount of unsecured credit is available at all, it is typically at an interest rate substantially higher than that available under a mortgage security.

156. It is difficult to assess just how such a novel instrument might be received more broadly. The incentives-based nature of the scheme (no direct prohibitions, unlike the LVR limit) suggests it would be likely to receive a more interested and sympathetic hearing, although new levies are rarely popular with those adversely affected. As noted earlier in this report, however, there is no close international precedent for such a formalised discretionary use of a mortgage interest levy. It could, however, be seen as similar in spirit to the unremunerated reserve requirement system imposed in Chile for a number of years. Such an instrument would be likely to be received rather sceptically by markets and international agencies and commentators, and would take considerable time to establish any credibility.

Initial Assessment

157. If you wish to proceed further in developing a supplementary discretionary stabilisation tool, for use in periods when the housing market is particularly stretched, and New Zealand interest rates are unusually out of line with those in other countries, a mortgage interest levy has the advantages of being an explicitly price-based instrument and rather better targeted. It could be expected to mute the extremes of exchange rate cycles, although the magnitude of any impact is uncertain.

158. However, to keep it robust through time would require major ongoing efforts to ensure that avoidance was kept to an acceptable minimum and doing so effectively might pose conflicts with wider economic and trade policy goals. Moreover, the levy would raise the cost of mortgage credit to households (affecting most severely lower income and new entrant borrowers) and small businesses, relative to that available for corporate and other lending. There are also serious questions around the appropriateness of allowing such a tax-like instrument to be levied administratively, and risk of subtly undermining the operational autonomy of the Reserve Bank in conducting monetary policy. Each of these areas would require substantial additional work if you wished to pursue this option any further. If you did wish to consider the option further, we believe that it should be assessed against a range of other possible discretionary demand management tools (including tax ones) which were beyond the scope of this particular project.

Section 4 Overall Evaluation

159. Housing market cycles have been a recurrent feature of developed market economies and will, no doubt, continue to be so. The large and prolonged housing market cycle of recent years, and the associated pressure this has placed on domestic resources and the exchange rate, has prompted this review as to whether there might be useful tools which could supplement the central role of interest rates in managing demand. A range of options, relevant now and in any such future cycles, has been explored in this paper.

160. Our sense is that modifications to the prudential framework, as part of the implementation of the Basel II regime, provide some sensible longer-term options. A more limited modification of the existing capital adequacy framework, to draw some link at this stage between capital requirements and the loan to value ratio on new mortgages, could be implemented relatively quickly. Tailoring capital requirements to risk under Basel II would be well-warranted on its own terms (as part of an appropriate capital adequacy regime for New Zealand), and should leave the banking system better placed to cope with future periods of stress. However, it is less clear what contribution such measures would make to this, or future, housing cycles, and hence how much pressure they might relieve from the OCR and the exchange rate. It would be unwise to count on those effects being very large (and were they to be large, disintermediation to unregulated institutions would be likely to be a major looming concern). Partly because any beneficial side-effects would almost certainly be small, we would be wary of making changes now to the existing capital requirements ahead of the Basel II schedule.

161. Of the housing taxation instruments reviewed to see whether any might assist in countering marked cycles in housing prices, we believe that there may be merit in encouraging Inland Revenue to take into account broader cyclical considerations when setting the priority given to enforcement of existing income tax law that makes gains on properties (other than those occupied by the owner) purchased for resale liable for income tax. The evidence suggests that a surprisingly large share of properties have been bought and sold again within a two year period around the peak of the current cycle. At the margin, greater public awareness of these provisions, and more stringent enforcement, might offer some incremental gains in dampening housing inflation in periods of particular housing market stress. Beyond that, any further policy measures would require more work to better understand the role that short-term and speculative activity plays in housing cycles.

162. We also consider that further work would be warranted to examine issues around land use and the ability of housing supply to respond to rising prices and other indications of rising demand for housing. We do not think there is yet a very good understanding of which rules and practices may be acting as inappropriate constraints, but are conscious of the US literature that highlights the differences in housing cycles seen between markets where supply is able to respond quickly and those where that is not possible.

163. New direct discretionary stabilisation instruments, such as those examined in this paper, could be used to supplement the OCR at periods of particular pressure. Of the two options examined, the mortgage interest levy has the merits of being an explicitly price-based instrument and of being somewhat better-targeted. Instruments of this sort, which go well beyond mainstream international practice in managing cyclical pressures, might

appear to offer an effective technical means of influencing the housing cycle and easing, to some extent, the pressures on the exchange rate and the tradables sector. But they also pose a multitude of problems, including issues around the extent to which such powers could appropriately be delegated by Parliament, the potential to erode the Reserve Bank's operational autonomy in conducting monetary policy, and the difficulty of maintaining a strong and ongoing enforcement regime. These would be among the issues that would require significant additional work if you wished to explore this option further. If you wished to explore this option further, it would also be desirable to consider other possible measures (including discretionary fiscal ones) that were beyond the scope of this particular project.

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Appendix One
Other Possible Measures

164. In addition to the options that are discussed extensively in the body of this paper, the review team also considered briefly a variety of other possible measures. These measures are discussed below, including an explanation of the reason why we did not examine each in greater depth.

Tax options

Transactions taxes (stamp duties)

165. Taxes or duties can be imposed on instruments that give effect to property transactions such as agreements for the sale and purchase of land and buildings; mortgages; and leases. They increase the costs associated with property transactions and will, to some extent, result in fewer transactions taking place than might otherwise occur, which will tend to adversely affect labour mobility and the efficiency of use of the building stock.

166. Stamp duties remain common internationally, but have little observable impact on the nature of housing cycles (for example they are present in Australia, the UK, and the Netherlands, all of which have undergone marked housing cycles in the last decade).

167. There is some evidence that changes in the level of duties can have an effect on housing turnover. In New Zealand, housing turnover increased slightly in the years following the removal of stamp duty on houses in 1988 (although a variety of other factors would have been at work). As noted earlier, a temporary easing of the UK's stamp duty was associated with a material increase in turnover. However, while there is (unsurprisingly) evidence that changes in duties of this sort can affect turnover, the impact on the balance between the supply and demand for houses, and hence on house prices is less clear, and is theoretically ambiguous.

168. The property vendor tax in place in the state of New South Wales (unable, of course, to set its own monetary policy) from May 2004 until August 2005 is an example the use of this type of instrument as a discretionary stabilisation measure. The impact of the tax is unclear as the rate of price appreciation in the residential property market was slowing when the tax was implemented, but it is likely to have reinforced the slowing trend.

Land tax

169. In contrast to stamp duties, comprehensive taxation of the unimproved value of land at a relatively low rate is considered to have important efficiency advantages. In particular because the supply of unimproved land can generally be considered fixed, a broad land tax is unlikely to significantly distort land use or building and housing choices. Further because it is a holding tax it does not have the same impacts on labour mobility and the efficiency of use for the housing stock. It would diminish the expected return from investing in property and thus would lead to a reduction in the level of demand and in the price of land.

170. However, a broad-based land tax is not clearly directed at either the residential investment market or housing sector credit growth and would not be expected to affect

the cyclical behaviour of the housing market very much at all (although there is a mild automatic stabiliser effect at work). The effect would be to raise the costs of home ownership, and it might make investment housing more attractive relative to owner occupied housing if the tax were able to be deducted as an expense by landlords.

Housing income tax (imputed rents)

171. In general, the rental payable on a dwelling reflects the value the occupant places on residing in the property. In the case of rental property this value is made explicit through the rent charged by the landlord, and on which the landlord must pay income tax. Similarly income derived from other sources e.g. dividends from shares and interest income is explicit and is taxed. However in the case of owner-occupied housing the rental is implicit and no income tax is payable. The exclusion of implicit rental income from the tax base may therefore encourage investment in home ownership relative to other forms of investment.

172. By raising the ongoing costs of home-ownership bringing imputed rental income into the tax net would likely lead to some drop in house prices. Homeowners with fixed incomes in high value properties (and typically with little outstanding mortgage debt, the interest on which could be deducted from the imputed rental income) would likely be the most heavily affected (eg pensioners). On the other hand, more equitable treatment of renters (typically households on low incomes) and home owners would be achieved.

173. However, because this measure is unlikely to directly affect the cyclicality of house prices it was not considered further in this review.

Housing finance and purchase options

Limit on term of mortgage finance

174. The faster loan repayments must be made, the less any borrower is in a position to borrow. Accordingly, capping the term of residential mortgages (either permanently, or at periods of particular pressure in the housing market) might reduce the effective demand for housing credit. If so, this would reduce the extent to which the OCR needed to be raised to keep inflation pressures in check.

175. To be effective, however, this mechanism would also have to mandate even repayments over the life of loan. Otherwise, loans would be specified with a single large payment due at the end of (artificially shortened) life of the loan, which would in turn be financed with a new loan. Moreover, such a scheme would severely disadvantage lower income borrowers, precisely the group who if they are to be able to afford their own homes need to be able to spread repayments over the longest period. For these reasons, we have not developed this option further.

A ban on pre-selling houses/apartment

176. In Hong Kong, a ban on pre-selling apartments has been used as a tool to dampen speculation in the residential housing market. In various overheated markets apartments have often been bought and sold, sometimes several times, before they have been built,

or before construction has started. This sort of option is unappealing on several counts: it directly interferes with a citizen's freedom to buy and sell (and to hedge themselves against possible future price increases); at the margin it probably dampens the response of the supply of new housing to price pressures (by shifting the risk from purchasers back to developers); and is most relevant to apartment complexes (with long construction lead times), which are not the dominant form of housing in New Zealand. Moreover, in the current cycle the apartment boom in New Zealand already appears to have run its course.

Housing credit auction

177. In some emerging markets, credit auctions have been used by the authorities to more directly control the availability of credit. Under such a system, successful bidders win the right to undertake a specified volume of lending, at a price determined on a competitive basis. Such a system, applied to housing credit, could, in principle, be applied on a discretionary basis, at times of particular pressures in the housing market.

178. Adopting such a mechanism would be a serious step out of the mainstream approach to monetary management. It would require a comprehensive regime that prevented anyone other than a successful bidder from providing housing credit (otherwise evasion would be relatively straightforward), and would leave no link between the level of credit created and the actual risk lenders and borrowers might actually be prepared to run. Moreover, in developed banking systems the relationships between credit growth and demand/activity/inflation variables have long been weak enough that quantitative tools have generally been eschewed. We simply do not know, with any precision, how much credit growth is consistent with avoiding exacerbating macroeconomic imbalances.

Required liquidity ratio

179. A further possible approach would be to require lenders to hold additional government securities[18] in proportion to any growth in residential housing lending (at periods of particular pressure in the housing market). In spirit, this would be somewhat akin to the old reserve asset ratio system used in the 1970s and 1980s. Given that government securities are relatively scarce (and tend to be particularly so when the exchange rate is around cyclical peaks) a reasonably high ratio, if enforced, could be effective, by posing a tax on housing lending (scarce government securities would earn yields well below what fundamentals would justify).

180. Enforcement would be serious problem (a whole new infrastructure would have to be created, and revived each time the ratio was activated), the resulting distortion to the government securities market would be substantial, disintermediation through the establishment of a mortgage-backed securities market would follow quite quickly, and our analysis suggests that the same benefits could be achieved more readily using the mortgage interest levy option[19].

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[18] To be effective, only government securities could be used. Allowing private securities to be used would, in effect, make the supply of securities responsive cheaply to the needs of housing lenders and, in a world where funding is not unduly constrained, largely undermine the impact of the ratio requirement.

[19] Note that as part of its prudential supervision policy, the Reserve Bank is considering whether some sort of liquidity requirement should be established for banks (such requirements are common internationally). Such

Banking supervision options

Quantitative restrictions on lending secured against residential property

181. Using its existing powers, the Reserve Bank could quite quickly impose fixed quantitative limits on lending undertaken by registered banks secured against residential property.

182. Certain classes of lending could be prohibited or limited in quantity, either with a fixed ceiling by dollar value or by proportion of total assets, or with a limit on growth rate. The classes could be distinguished on the basis of:

- risk characteristics of the loan (e.g. LVR);
- characteristics of the borrower (e.g. borrower's debt-to-income ratio); or
- purposes of the loan (e.g. for purchase of non-owner-occupied residential property).

183. Disintermediation would quickly become a major problem, given that the Reserve Bank's existing powers cover only registered banks. Moreover, the Bank could expect to be challenged as to whether such restrictions were really justified primarily by financial stability and soundness considerations. While LVR limits are quite common internationally, they are typically not absolute limits, but rather limits where higher capital is required to be held against any higher LVR loan where the lender has not taken mortgage insurance (the possibility of using these sorts of provisions is covered in the main portion of this paper).

Require banks to undertake dynamic provisioning for loan losses

184. It is well known that in Spain the authorities have moved to require banks to engage in dynamic provisioning - in effect, to increase general provisions for loan losses at times (specifically the up leg of the economic cycle) when specific identifiable non-performing loans are at their lowest. Our regular consultations with banks indicate are that Australasian banks already engage routinely in some form of dynamic provisioning. Whether or not banks' reported voluntary dynamic provisioning is effective in keeping provisions at a prudent level through the cycle is, of course, an empirical question. Moving to require the use of dynamic provisioning in New Zealand would be unlikely to be particularly well-targeted to addressing issues around the rapid growth of housing mortgage lending.

Issuing guidelines on bank housing lending

185. Under the Reserve Bank Act the Governor may issue guidelines for the purposes of interpreting the term "carry on business in a prudent manner", matters relating to which the Reserve Bank may impose conditions of registration.

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requirements are designed to ensure that banks are adequately placed to cope with periods of financial stress, and are not instruments designed (or expected) to alter bank lending behaviour or affect the credit cycle.

186. There are no statutory requirements for consultation before issuance of guidelines (unlike for conditions of registration), meaning that they could probably be issued very quickly (a lag involving only the few weeks necessary to draft them). However, current Reserve Bank practice is generally to consult reasonably fully on any substantive regulatory initiative. Such guidelines could have a useful moral suasion role if, but perhaps only if, more tangible restrictions were likely to be implemented relatively quickly thereafter.

187. Issuance of guidelines on detailed matters of banks' lending policies (eg specifically relevant to housing lending) would be a significant divergence from current banking supervision approach. We expect that such guidelines would have only a limited effect, as there are no statutory consequences for a bank failing to adhere to guidelines. Moreover, were guidelines to be effective in influencing banks' willingness or ability to provide new housing credit, disintermediation would be likely to be a major emerging problem because the powers can used only with registered banks.