

# Mortgage Interest Levy, A Detailed Option

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

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## Executive Summary

Last year's Supplementary Stabilisation Instruments report canvassed the possibility of using a Mortgage Interest Levy (MIL). The MIL was envisaged as an additional demand management instrument, to be used in fairly exceptional circumstances, to supplement the OCR in periods when housing market-related pressures in New Zealand were particularly intense, and when the interest rate cycle in New Zealand was out of step with that internationally. The scheme was conceived as a way of reducing any adverse impact on the tradables sector that might otherwise arise from the monetary policy measures needed to keep overall inflation pressures in check.

This report develops the MIL option at greater length, and outlines in greater detail some of the key judgements reached in last year's report. As our work has been stopped sooner than was originally envisaged, there is still a variety of detailed issues that would need to be resolved if a decision in principle was ever made to introduce the MIL. We have sought to identify as many of those issues as possible. The work on this project has been undertaken largely by Reserve Bank and Treasury officials, in consultation in some areas with Inland Revenue and the Ministry of Foreign Affairs and Trade.

This report does not attempt to undertake an overall assessment of whether an MIL instrument should be introduced to the toolkit. Rather, it attempts to flesh out a best possible model, to provide a basis on which such an assessment could be made. Such an assessment would normally be made having regard to such criteria as the efficiency, effectiveness, and distributional impact of this instrument, in comparison with available alternatives.

Key features of the MIL developed here are:

- The MIL would apply to all loans secured on an economic interest in residential property (hereafter "residential mortgages")
- The MIL would be a flat rate (x basis points) across all residential mortgages, fixed or floating, existing or new.
- The MIL could be operated in either levy mode or subsidy mode (the latter in periods when housing-related pressures etc were particularly weak).
- The MIL would be collected (paid out) by IRD from lenders, although the ultimate liability for the levy would rest with the borrower.

- Decisions to adjust the MIL would be made by the Minister of Finance, on the recommendation of the Reserve Bank.
- Factors that the Bank would be required to consider in preparing any recommendation would be laid out in statute.
- The Reserve Bank would be required to explain publicly, in terms of the statutory criteria, the basis for any use/adjustment of the MIL.
- The Minister of Finance would be required to explain publicly the grounds upon which any Reserve Bank recommendation to use/adjust the MIL was rejected.
- Funds raised (when the MIL was in levy mode) would be held separately outside core Crown finances, and would not ease the government's fiscal constraints. These funds would be used to finance use of the MIL in subsidy mode.
- The legislative net would need to be cast quite widely to minimise domestic avoidance opportunities. International avoidance risks could probably be kept acceptably low, provided that all lenders registering a residential mortgage were required to be registered in New Zealand for tax purposes.

The MIL could be expected to cover around 40 per cent of total New Zealand dollar credit. If it was effective, it could be expected to dampen the peaks of exchange rate cycles a little, and would allow the OCR to be set lower than otherwise. Our provisional estimates are that for each 100 basis points of MIL, no more than 50 basis points of relief on the OCR would be provided. In other words, finance costs for those using a house as security would be higher than otherwise while financing costs for those using other security (or borrowing unsecured) would be lower than otherwise.

An MIL could, in principle, provide useful support to conventional monetary policy in some circumstances. There are, of course, significant operational and distributional issues around any such supplementary tool. Because this project was drawn to a close earlier than had originally been envisaged, there are a number of outstanding issues around the design of the scheme, and several which would benefit from more extensive discussion and debate before any overall recommendation could be made on the merits of the MIL. No instrument is perfect, and any overall recommendation would need to carefully evaluate the costs and benefits of an instrument such as the MIL, which has no direct international precedent, against the costs and benefits of relying exclusively on conventional monetary policy instruments.

## 1. Introduction

In the Supplementary Stabilisation Instruments Report (hereafter SSI Report), prepared last year by a team of Treasury and Reserve Bank officials, the option of a mortgage interest levy was canvassed. An initial description and evaluation of such an instrument was done. However, various outstanding issues were identified and it was recommended that further work be done on these issues if policymakers wished to consider more seriously the mortgage interest levy as an option to ease peak pressures on the exchange rate and the tradables sector.

Late last year, such work was commissioned and Bank and Treasury officials were invited to develop the best-possible model of a mortgage interest levy (hereafter MIL), to provide a basis for an informed assessment as to whether or not such an instrument should be adopted. This report summarises the work that has been done, and outlines the key features (and limitations) of an MIL option. The focus of the report is not on whether or not such an alternative instrument **should** be used, but on presenting the best option that **could** be used. Work on this report has been brought to a conclusion sooner than was originally envisaged. As a result, various issues remain outstanding which would need to be evaluated in greater depth if the option of a mortgage interest levy was ever to be pursued further.

This report is organised as follows. We briefly review the reasons for considering an alternative supplementary instrument of this sort, and then step through the various design issues and choices, and attempt to develop some appropriate governance and accountability arrangements. We attempt to provide some assessment of the economic impact of the instrument, as it is developed here, and briefly highlight some of the implementation challenges.

## 2. Economic context

Interest in an instrument such as the MIL arose in a specific context: one in which domestic demand pressures were intense, and at a time when key international interest rates remained historically quite low. In that sort of environment, raising the OCR in New Zealand would tend to lift the exchange rate, perhaps quite markedly, while the impact on longer-term New Zealand interest rates could be relatively muted. In that sort of situation, a disproportionate share of the burden of keeping overall inflation pressures in check might fall (through the resulting increase in the exchange rate) on the tradables sector, with possible longer-term implications for the health and growth of that sector. By contrast, if demand pressures around the world were more synchronised, monetary authorities around the world would be raising interest rates at much the same time. In that sort of environment, rising New Zealand interest rates might have little overall impact on the exchange rate. International economic (and interest rate) cycles do appear to be becoming more synchronised over time. However, in recent years, for example, intense demand pressures in New Zealand have led to significant increases in the OCR at a time when interest rates in major savings surplus countries have remained very low (notably those in Japan, where the policy rate has only recently risen above zero).

Faced with that sort of combination of circumstances, we reviewed whether there were mechanisms which could, without creating other undue distortions, allow borrowing costs to New Zealand dollar borrowers to increase without at the same time offering increased returns to foreign savers (whose demand for New Zealand dollar products is widely regarded as being quite responsive to changes in relative interest rates). The higher borrowing costs would be intended to dampen overall demand and inflation pressures without the undesired spillover of pressure onto the tradables sector of the economy. If such a mechanism could be devised it might, by reducing

the amplitude of cycles in the OCR, offer the possibility of moderating the wide amplitude of exchange rate cycles in the New Zealand dollar.

### **3. Instrument design**

A levy on borrowing costs was the mechanism we chose to explore. To evaluate such an option, the details of the scheme need to be elaborated. The first of the issues we explored is the question of the base to which the levy would be applied.

#### **3.1 The levy base**

At a conceptual level, one would seek to apply such a levy to all credit raised for use in New Zealand, since it is overall demand for resources in New Zealand that gives rise to inflation pressures, and hence the need for increases in the OCR. Such a levy could be, to a first approximation, a one-for-one substitute for the OCR.

As discussed briefly in the SSI Report, we do not regard such a broad base as being feasible. Credit to major corporates helps illustrate the issues. Much of this credit is unsecured. Such credit is both harder to identify and easier to transform into forms (eg quasi-equity) beyond the definitional reach of any levy. Moreover, much of such credit could readily migrate to alternative lenders offshore – most large firms already use offshore markets, in many cases quite extensively. One possibility might be to consider preventing companies from claiming interest deductibility for income tax purposes unless they could verify that an interest levy had been paid in respect of that interest. Initial discussions suggest that such a model would be very difficult to operationalise, especially given the role of offshore financing subsidiaries used by many large firms. Recent proposed changes to tax law, under which the profits of foreign subsidiaries of New Zealand companies would not be taxed here until the profits are remitted to New Zealand, might also complicate the picture.

It would probably be technically feasible to apply a levy to New Zealand sourced credit secured on farms (around a quarter of all bank business credit in New Zealand) and other corporate credit secured on land and buildings. Avoidance issues associated are dealt with at greater length later in this report, but we should note that the much greater size of most corporate and farm loans, and the greater sophistication of many of the borrowers, would materially increase the risk that widespread avoidance of such a tax would occur. It would, moreover, be rather arbitrary in its impact - imposing a levy on finance secured over some forms of business assets, and hence on some types of business activity, but not on others (eg on businesses that rely on land assets, but not those reliant on human capital).

Accordingly, the instrument developed here (the MIL) is a levy on debt secured using an economic interest in land and buildings, where the predominant use of that property is residential purposes. The practical attractions of a residential mortgage base include the ability to identify the credit (to be fully effective, mortgages have to

be registered), and the fact that the overwhelming bulk of mortgage credit does not cross international borders.

We would expect that something like the phrase “predominant use” would be used in the enabling legislation, and some more specific guidelines might be needed (including, perhaps, some on what is not included). The provision of more specific guidelines increases certainty. The boundaries would inevitably be somewhat arbitrary, and provide a starting point for efforts to structure financing transaction beyond the reach of the levy. Either way, over time boundaries would be drawn by the courts.

The MIL has not been envisaged as an instrument that would capture loans secured on farms (which typically have at least one residence on site), nor on other industrial or commercial properties which might, say, have accommodation for a caretaker. It has not been envisaged as applying to short-stay accommodation such as motels and hotels, although no further work has been done on where those boundaries might be drawn exactly.

Given the financing structures used at present, we would expect to attempt to capture all loans provided using a mortgage on residential property (including non-housing loans secured under all-obligations mortgage documents). For the remainder of this document we typically use the shorthand form of “residential mortgages” as the base for the MIL, but we recognise that the legislation would need to be drafted to capture any innovative financing structure the economic substance of which relies on security over a residential property.

Overall, our judgement at present is that attempting to broaden the base of an interest levy scheme beyond residential mortgages would quickly generate significant additional problems, complications, and ongoing efficiency costs, which would outweigh any benefits such an approach might appear to offer.

### **3.2 All mortgages or new mortgages only?**

A key design choice is whether the MIL would apply only to new loans (or newly renegotiated pricing terms; eg, when a fixed interest rate term expires) or to all loans.

If the instrument was being developed primarily to address house price overvaluation, as an independent goal, there would be greater merit in considering a tax applying only to new loans. However, even then other more direct instruments could probably be more effective.

In fact, the MIL has been conceived primarily as an instrument to assist overall demand management. In other words, the goal is not to dampen house price inflation for its own sake, but to assist in dampening overall household spending and meet overall inflation control objectives without exacerbating pressure on the exchange rate and the tradables sector.

If the MIL was to be applied only to new (or newly refinanced loans) it would have a number of undesirable distortionary effects. First, once the prospect of the MIL being

used moved into view - and marketers would no doubt highlight the risk rather quickly - it would encourage potential house buyers and borrowers to bring forward their purchases to avoid the levy, in turn accentuating the pressures on demand and the housing market that were already apparent. Behaviour could change many months or quarters before serious consideration was being given to activating the MIL. Secondly, even if the levy was applied to all loans, but only when the existing fixed interest rate period expired or was refinanced, this also would be likely to distort choices. In particular, we could expect to see households anticipating the MIL by opting for even longer fixed terms on their mortgages, in the expectation that by opting for, say, a five or seven year fixed rate term, the borrower could expect to avoid the impact of the MIL entirely.

On balance, then, the model proposed in the SSI Report, in which the MIL would be levied on all residential mortgages remains preferable. It does, of course, have some difficulties. The most telling is that borrowers with fixed rate terms had contracted (and budgeted) on the assumption of fixed servicing costs for the period for which the interest rate is fixed. The MIL represents a quasi-tax overlay, increasing the total cost of that finance, and reducing the degree of certainty available to those utilising fixed rate mortgages. The additional uncertainty is real, but should not be overstated. Most fixed rate mortgages in New Zealand are for 2-3 year terms, and so on average are no more than 12-18 months away from repricing anyway. Moreover, once the instrument was enacted, the possibility of the MIL being used would be factored into the expectations of potential borrowers, and into the servicing limits adopted by potential lenders. As noted below, even the very first use of the MIL could not take place for many months after a policy decision was made to proceed with the instrument.

### **3.3 A flat levy or one variable by term?**

The next issue to be addressed is whether an MIL would be levied as a flat rate across all mortgages, or whether it might be preferable to impose a variable levy designed to bring all fixed rate mortgage rates up to something like the floating mortgage rate.

One of the observed facts prompting consideration of something like an MIL has been the widespread shift over recent years from floating rate mortgages to fixed rate mortgages. In the last few years fixed rate loans have typically had considerably lower interest rates than variable rate loans. This trend is partly cyclical - a very similar pattern was observed in the mid-late 1990s. The availability of lower fixed rates is seen by some as weakening the "bite" of monetary policy: actual or expected OCR increases raise 90 day bill rates and the floating mortgage rate pretty much one for one, but the impact of rates on, say, two year interest rate swaps is considerably more muted. In the current context, concerns have been accentuated by the fact that intense competition in the mortgage market has recently centred around the two-year fixed rate term. At present, for example, interest rates on 90 day bank bills are around the same as those for two year interest rate swaps, but banks' carded floating mortgage rates are around 100 basis points higher than those for two year fixed mortgages

Of itself, none of this should be either surprising or unsettling. A two year fixed interest rate (retail or wholesale) encompasses - implicitly or explicitly - an expectation about where the OCR and shorter-term floating rates will move over the subsequent two years. No one - central bank or market - knows what will happen that far ahead with any certainty. But when short-term interest rates have been above neutral for some time, it is entirely normal (internationally) and understandable that markets would expect rate cuts at some stage over the following two years. The same holds in reverse when short-term interest rates have been below neutral for some time - in those periods, fixed rates are typically at or above floating rates.

These sorts of considerations suggest that there is no need for an MIL to be anything more than a flat rate levy across all mortgages. The goal is to raise overall household borrowing costs, not to change the shape of the retail interest rate yield curve. There is no strong public policy interest in attempting to pull fixed mortgage rates back up towards floating rate levels by administrative means, nor to penalise those households who have hedged their servicing costs by imposing a higher levy rate on fixed mortgages. Administratively, a levy that varied by term would also be more complex. Finally, to impose a large levy solely on longer-term fixed rate residential mortgages would highlight the gap between the financing costs facing households taking, say, five year fixed rate interest rate hedges, and corporates undertaking the same sort of hedging activity.

### **3.4 Collecting the levy**

On balance, we favour establishing the MIL formally as a levy on the borrower. The economic incidence of the levy should not be affected by the choice of whether to levy the lender or the borrower. However, borrowers are less mobile than the source of financing is, and as discussed later in this report, enforcement issues raised by this mobility suggest that it is preferable to keep the borrower as the party ultimately responsible.

As discussed in SSI Report, the most workable (administratively feasible) model would impose a collection and remittance requirement on lenders. The borrower's obligation would be discharged in full if the lender had paid the MIL in respect of the borrower's loan.

Most of those lending on residential mortgage security will already have processes in place for making regular returns and payments to IRD, including those for resident withholding tax (collected on, for example, interest paid on deposits). By contrast, if borrowers were required to make payments directly to Inland Revenue (or some other agency) a substantial additional identification and enforcement effort would be required. All mortgage borrowers (some 900000) would presumably be required once again to submit tax returns and make periodic lump-sum payments. The same logic led to the adoption of a PAYE model on wage and salary incomes in the first place - the employee is liable for the tax, but the employer is responsible for withholding it and paying it to IRD.

There is a variety of issues even with this model. The MIL is envisaged as an instrument that would be used only periodically (perhaps a couple of years every

decade) and yet whichever agency was responsible for collecting and enforcing it would need to retain systems capability all the time and the ability to quickly add or reprioritise staff resources when the MIL was in place. These are not trivial issues for the agency in question and could mean material ongoing costs even when the instrument was not being used. We have not attempted a formal costing at this stage.

Other issues that would need to be resolved would include the precise formula. We envisage that the levy would be applied as a specified percentage of daily average mortgage balances. If, by contrast, the levy was tied to actual interest payments it might encourage the use of, say, zero coupon mortgages to those with large amounts of equity in their house, or the deferral of interest payments for a couple of years in the hope that the levy would have been lifted by then. Specifying the MIL as a percentage of the outstanding loan also reduces any incentive to transform a New Zealand dollar mortgage into a low interest rate (eg, Japanese yen) foreign currency mortgage.

A minor issue, which we have not formally explored, is whether there should be any sort of *de minimis* threshold, whereby lenders with total mortgage lending outstanding of less than, say, \$50000 should be exempt from the MIL (and associated reporting requirements etc).

### **3.5 Should the instrument be symmetric?**

Most discussion of an MIL has centred on the role the levy could play in periods when household demand pressures in New Zealand are particularly intense. However, as was noted in the SSI Report, there is no reason why the instrument should not be applied in reverse; that is, as a subsidy to residential mortgage borrowers in periods when household demand pressures are particularly weak and the exchange rate is undershooting its long-run normal levels.

Several considerations favour designing the MIL in a symmetric manner. First, it makes it clear that the instrument is not intended a revenue-raising device, but rather is simply a supplementary tool of macroeconomic stabilisation policy. That, in turn, makes it more feasible for the funds raised by the levy to be held at arms-length from core central government finances (because the levy is envisaged as broadly revenue neutral in the long run). Finally, in the remote possibility of the zero interest rate bound ever being a binding constraint on monetary policy in New Zealand the MIL in subsidy mode might be a useful auxiliary instrument to have in the tool kit.

The operational issues around running the MIL in subsidy mode do not appear to be materially different from those in levy mode (flows are simply reversed). However, one important asymmetry should be noted. The margin between mortgage borrowing rates and bank deposit rates provides a constraint on the extent to which the MIL could be used in subsidy mode. Were the subsidy to materially exceed the margin between borrowing and deposit rates, it would pay borrowers to increase their mortgage, claim the MIL subsidy, and simply place the funds on deposit<sup>1</sup>. Bank

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<sup>1</sup> This assumes that borrowers would be able to deduct borrowing costs against the interest earned on deposits. That would almost certainly be the case for investment properties and might well be the case

margins have varied through time, but have been tending to narrow. It would be unwise to assume that the MIL in subsidy mode could be set greater than 100-125 basis points. There is no such economic constraint on the size of the MIL in levy mode.

The remainder of this paper, and in particular the design of the governance, accountability, and revenue management arrangements assumes a symmetric model of the MIL.

### **3.6 Automatic or discretionary?**

We have explored the possibility of a formula-based method for triggering, and adjusting, the MIL, and have concluded that this is not a feasible option. A formula-based model would resolve many of the governance and accountability issues raised in the SSI Report (and discussed in greater depth below), so it is worth outlining why a formula-based model would not be workable.

We envisage that an MIL would make sense where many of the following circumstances applied<sup>2</sup>:

- When demand pressures resulting from the housing market, or the market for housing finance, were unusually intense, and when overall pressures on resources were arising disproportionately from the housing and consumer sector.
- When the gap between New Zealand and relevant foreign interest rates was unusually large (so that New Zealand demand pressures were being reflected substantially in an appreciation of the real exchange rate).
- When a material overvaluation of the housing market was in prospect.
- When a material overvaluation of the exchange rate was in prospect.
- When the overall pressure on resources was already material (in the jargon, when a material positive output gap was in prospect).
- When the OCR was already at a contractionary (above neutral) level.

Each of these is conceptually capable of being reduced to a numerical formula. However, each individually relies on uncertain and changing numerical estimates, which could not sensibly be written into statute as the basis for adjusting an economic policy tool. Moreover, use of the MIL would not typically be warranted when just a single criterion was met, and the interplay between the various considerations above would be different in each cycle.

In summary, then, we see little realistic alternative to a discretionary instrument. In that respect, the MIL is no different from conventional monetary policy. For conventional monetary policy, goals can be sensibly specified in advance, and the Reserve Bank can outline the ways in which it is likely to think about and react to emerging developments, but central banks generally have not regarded it as desirable

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on owner-occupied properties (given that the additional borrowing would be undertaken explicitly to fund the investment assets (the deposits).

<sup>2</sup> These points relate to use of an MIL in levy mode. They can be reversed for considering use of an MIL in subsidy mode.

to adopt, let alone publish, a detailed binding rule for deciding how monetary policy should react to specific combinations of emerging data.

Instead, we would envisage that the legislation establishing the MIL would list a series of criteria to be taken into account in deciding whether to invoke or adjust the instrument. These criteria would be essentially those listed above, and the authority deciding on the use of the MIL would be required to have regard to each of these considerations, and report publicly on how decisions to use the MIL were justified against these criteria.

## **4. Enforcement and base protection issues**

### **4.1 *Domestic issues***

We focus here on two broad classes of risk. A number of others have already been anticipated in choices made about parameters of the instrument in the discussion above.

The first is the risk that some credit will migrate from secured to unsecured instruments. This risk is reduced to some extent by specifying that the MIL would apply to all credit on which a lender is able to use a mortgage over a property as security for. Thus, the common all-obligations mortgages provide a lender with security not just over a housing loan but also, over, say any credit card, personal debt, or even derivatives contracts that the customer has with that lender (and which the customer may typically think of as being unsecured).

It might appear that the risk of migration to unsecured credit is limited, given the large wedge that exists at present between mortgage rates (around 8 per cent) and interest rates on unsecured personal loans (often with a starting point of around 15 per cent). However, it is important to recognise that this pricing structure reflects the current absence of regulatory distortions. At present, anyone with collateral borrows using that collateral (at, say, 8 per cent), while only those without any collateral take any material volume of unsecured debt. Thus the pricing structure broadly reflects the typical risk profile of those seeking unsecured debt.

However, the imposition of an MIL, especially if it became a significant portion of total credit costs (say, 100 basis points), would encourage both borrowers and lenders to reassess the position. A well-established customer, with an unblemished payments record, with substantial equity in, say, a \$500000 house, and with, say, \$75000 in mortgage debt outstanding would not normally consider using unsecured debt. However, with a 100 basis points MIL in place, this customer might well appear to the lender to be a good credit risk for much of that debt even on an unsecured basis - not at the prevailing secured mortgage rate, but perhaps at 50 basis points above that rate (in this example, saving half the cost of the MIL). If the borrower defaults, the assets (the house) are still available in bankruptcy to provide repayment to the lender, and in the meantime the lender collects a risk premium on the interest rate.

Of course, such unsecured lending (at least by registered banks) would mean higher capital requirements, and might well lead to questions being asked by both home and parent supervisors. Moreover, there are limits to the scope for this sort of migration to unsecured credit to occur – no lender is likely to allow a first home buyer unsecured credit of even 50 per cent of the value of the house - but even if the legislation could be drafted tightly enough to capture every loan actually secured by the underlying asset of a house, the actual base for the MIL would still be smaller than the current stock of secured lending would suggest.

The second area of risk is that the empowering legislation could not define the base sufficiently broadly, or the courts would not interpret the provisions sufficiently broadly, to capture the overwhelming bulk of credit secured, in economic substance, by a residential property. There is plenty of precedent for specific targeted measures failing to be fully effective because of the innovative responses of affected parties. Because the MIL is a new type of instrument, untried elsewhere, it is particularly difficult to anticipate all the ways in which financial innovation might threaten the intended effectiveness of the MIL.

The legislative net would have to be cast widely even to capture the sorts of avoidance techniques that our own analysis has identified, let alone those that product and legal experts would attempt to devise in the period from when a decision to proceed with an MIL was announced and when it was first put into effect. For example, the legislative provisions would have to capture loans secured over shares in a company, the principal asset of which was a residential property. A variety of option or insurance-based avoidance schemes have also been proposed. Advice at the time of the SSI Report was that the courts have tended to interpret tax law relatively narrowly, stressing legal form rather than economic substance. To the extent that that remained the situation, keeping the MIL as an effective option in the toolkit would require an ongoing willingness to pass amending legislation to close off loopholes as they were identified. Of course, we would not expect to catch all credit secured, in economic substance, on residential properties. As with almost any control or regulatory restriction, the appropriate test is probably whether the net could be cast sufficiently widely to materially change behaviour and perceptions, and/or impose material costs on those determined to ensure that their financing transactions are beyond the reach of the levy.

In the time available, we have devoted only limited effort to analysing the base protection issues when the MIL was operated in subsidy mode. Given the natural constraints on the size of any subsidy (discussed above) these risks may be more limited. However, provisions would need to be established to prevent, say, large unsecured corporate loans being transformed into loan “secured” by a mortgage on a small residential property (perhaps by capping the subsidy to apply to credit no greater than the current QVNZ registered value of the house)<sup>3</sup>.

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<sup>3</sup> It would be materially more difficult to effectively target the subsidy if the base of an interest levy was cast more widely than residential property. Many businesses with substantial unsecured credit also have substantial physical assets which could, at little cost, be used to bring the unsecured credit within the net of a interest subsidy scheme.

## 4.2 *International risks*

The most obvious means of circumventing an MIL, collected and remitted by domestic lenders, would be for residential mortgages to be made by a lender from another country. Given that the largest mortgage lenders are subsidiaries of Australian banks, the risk would appear to be greatest in respect of Australia. Local bank subsidiaries could simply act as marketing, processing, and risk evaluation agents, with the final mortgage being originated from the parent in Australia. Borrowers would simply make their payments of interest and principal to the parent, in conventional NZD terms.

Such borrowers would appear to be liable for non-resident withholding tax (NRWT) on any interest payments to non-residents (at a rate of 10 per cent of the interest paid to Australian lenders). If foreign lenders were not able to fully utilise those credits (NRWT is levied on gross interest, while a lender's final tax liability is on net income), the costs would be passed through to the domestic borrower, mimicking the impact of the MIL (although by no more than around 80 basis points at present<sup>4</sup>).

In the SSI Report we noted that the most promising means of closing off the risk of large quantities of residential mortgages moving offshore would be to require anyone registering a residential mortgage to be registered for tax purposes in New Zealand. Our understanding is that, in normal circumstances, few mortgages secured on New Zealand residential property are likely to be made by foreign lenders without any sort of operation here. If that presumption is correct, a registration restriction of the sort of envisaged would represent only a minimally intrusive distortion to existing financing patterns.

We understand, however, that LINZ has, at present, no mechanism for identifying whether a mortgage being registered is against a residential property, rather than any other property (it has no need to know). To impose this registration restriction, then, some additional mechanism would need to be established (perhaps using local council rating base information - rates typically differentiate between residential and commercial property). We have not investigated this issue further at this stage.

As we noted in the SSI Report, there is a risk that New Zealand's treaty obligations might constrain our ability to impose such a registration requirement. We have had initial discussions with MFAT, around the implications and any possible constraints of agreements such as CER and the General Agreement on Trade in Services (GATS). CER limits New Zealand's ability to discriminate against Australian firms. The intent of a tax/mortgage registration requirement would simply be to place Australian lenders on the same footing as domestic lenders. But there is still the possibility that such requirements could be seen as falling in a more onerous fashion on a non-resident lender. There are also exceptions in CER for measures designed to minimise tax avoidance, and the clear intention of the registration requirement would be to minimise avoidance of the levy. Should a decision ever be taken to proceed with an MIL, considerations of prudent risk management suggest that it would be important to approach the Australian authorities pre-emptively to ensure that they were fully briefed on the context and intent of the instrument.

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<sup>4</sup> 10 per cent of an 8 per cent typical mortgage interest rate.

A further legal issue should be noted. Most of New Zealand's Double Tax Agreements limit the amount of NRWT that may be charged on interest to 10 per cent of the interest payments. This means that the government may not be able to charge an MIL which, when added to NRWT already charged, exceeds 10 per cent of the interest payment. The fact that the MIL would legally be tax on the borrower rather than the lender provides an argument that the MIL should not be not subject to the treaty limitation, but there is still a risk that a court or a foreign tax administration may disagree.

Liability for the MIL would rest ultimately with the borrower, so shifting the loan from a New Zealand lender to a foreign one would not, of itself, remove the liability on the borrower. It would, however, add a layer of considerable administrative complexity if an enforcement regime had to be established to require borrowers to demonstrate that the MIL had actually been paid in respect of their loan. Avoiding that sort of administrative overlay was the reason for preferring to make lenders the collection agents in the first place.

## **5. Governance and accountability**

As outlined earlier, the criteria against which a decision would be made to activate (or increase/decrease) the MIL would be set out in legislation. As it would not be feasible or sensible for adjustments to be triggered mechanically, governance and accountability mechanisms take on a particular degree of importance. Governance and accountability mechanisms are, of course, a central feature of New Zealand's approach to the institutional management of monetary policy.

### **5.1 *Who should make the decision?***

The first set of decisions is around the question of who should make the decision to activate/adjust the MIL. As a supplementary monetary policy tool, it might appear natural for the decision to be delegated to the Reserve Bank, which also has independent responsibility for adjusting the OCR consistent with the Policy Targets Agreement.

The constitutional obstacles to this route, however, appear formidable. A fundamental principle of parliamentary government in the United Kingdom for many centuries, carried over into New Zealand custom and practice, has been that taxes and levies should not be raised without the active consent of Parliament. To delegate to an agency such as the Reserve Bank the ability to adjust a discretionary levy of the significance of the MIL would, as far as we can tell, be without precedent.

There is precedent in New Zealand law for Parliament to delegate to a Minister of the Crown the power to set or adjust particular levies. Note, however, that even in the limited range of cases in which this model has been employed, the adjusted levies have typically required ex post parliamentary ratification (and may lapse if not ratified).

Moreover, delegating the power to set/adjust the MIL to the Minister of Finance raises its own governance issues. The Minister of Finance is responsible for signing the Policy Targets Agreement and for holding to account the Governor of the Reserve Bank for his independent conduct in pursuit of that agreement. Introducing the Minister of Finance directly into the process of assessing current demand and inflation pressures, and of making the choice between an MIL and OCR adjustment, would muddy the waters of accountability. It would risk undermining perceptions of the operational autonomy of the Reserve Bank, and the ability of the Minister and Treasury to conduct effective ex post evaluation of the Bank's performance.

Given that the MIL is, by design, not intended to accumulate net revenue for the Crown over time (because it would operate symmetrically) a pragmatic compromise, which might reasonably balance constitutional concerns and the importance of safeguarding perceptions of the operational autonomy of the Reserve Bank in the conduct of monetary policy, would be a double-veto model. Under such a model, the Minister of Finance would approve the activation/adjustment of the MIL, but could do so only on the positive recommendation of the Reserve Bank. It would be possible to add a requirement for, say, annual ex post parliamentary ratification in any year when the MIL had been activated (either in levy or in subsidy mode).

Under this model, the Minister would have the power to reject the Reserve Bank's recommendation, but would normally be expected to accede to it.

## **5.2 Transparency provisions**

Consistent with this emphasis, the onus should be placed on the Reserve Bank to account for any decision to recommend using/adjusting the MIL. By contrast, the Minister of Finance should be required only to formally account for a decision to decline a recommendation to use/adjust the MIL.

We would expect that the MIL would normally be activated/adjusted at the time of a *Monetary Policy Statement* or an interim OCR review. The legislation should require that the Reserve Bank provide a substantive justification for any decision to recommend the use/adjustment of the MIL, against the criteria laid out in statute (discussed above). The *Monetary Policy Statements* provide a natural forum, and the Bank might be required to publish a special *Monetary Policy Statement*, articulating the case in terms of the statutory criteria, within 10 days of any other use of the MIL. On the other hand, the Minister of Finance should be required, within 10 days of any decision to decline a recommendation to use/adjust the MIL, to provide a public statement explaining his decision, again in terms of the statutory criteria.

## **5.3 Managing the revenue/expenditure implications**

The use of an MIL could involve raising/spending material amounts of money. A 100 basis points MIL in place for a year could raise/cost \$1.5 billion. If the MIL ended up being in place for 2-3 years amounts involved could easily approach a total of \$4-5 billion.

It would be important that the funds raised by the levy should not be available to finance additional public spending at the time the levy was in place. Allowing such expenditure increases would largely undercut the intended effect of the levy, by increasing domestic demand pressures at a time when they were already sufficiently intense to warrant imposing the levy in the first place. Similar considerations apply in reverse to the use of the MIL in subsidy mode.

A preferred option would involve the funds being held separately, with the balances involved being outside the variable chosen by the Crown to express its fiscal policy objectives (and hence the constraints on its other spending and revenue plans). In the time available, we have not developed a detailed model for the management of these funds, although there could be some logic to requiring that the funds be held in foreign currency assets (given that the levy would be imposed only when the exchange rate was judged to be materially overvalued).

The balances accumulated would be available for use when the MIL was in subsidy mode. We have not had time to finalise a model for how payments would be financed if the first use of the MIL was to be in subsidy mode. Given that the character of future cycles and pressures cannot be known in advance with any certainty, rules would also be needed to limit the indefinite accumulation of net receipts or net payments.

#### **5.4 Policy Targets Agreement implications**

Introducing an MIL instrument would not require any changes to the Policy Targets Agreement. The PTA is primarily a means of specifying objectives and constraints for the conduct of monetary policy, and does not deal with the available instruments at all. Nonetheless, were the instrument to be introduced, it might be sensible to mention it explicitly in the PTA, in part as a means of drawing the Bank's Board into the process, monitoring the choices the Governor is making in deciding when and whether to recommend the use of the MIL.

#### **5.5 A ceiling for the MIL?**

There is no particular technical reason to specify a maximum level of the MIL in statute. However, the use of a quasi-tax instrument such as the MIL does raise some issues about the extent to which Parliament would be comfortable delegating discretionary powers to the executive. In these circumstances, it might be prudent to constrain discretion, by limiting the MIL to, say, no more than 250 basis points. As discussed further later, this might allow peak relief on the OCR of around 125 basis points.

It has been quite rare, in any modern monetary policy cycle, for the official interest rate (in our case, the OCR) to be moved much more than 250 basis points away from the neutral short-term interest rate for the economy in question (or for total interest

rate cycles to exceed 500 basis points)<sup>5</sup>. Even in the sort of exceptional cyclical circumstances in which the use of the MIL might be warranted, we would still expect that the OCR should be lifted to somewhat above neutral (the MIL is a supplementary tool, not a replacement one). Thus, an MIL cap of 250 basis points would appear unlikely to represent the sort of constraint that would compromise the ability to use the instrument when it was needed.

Finally, as discussed earlier, there are technical constraints on the extent to which the MIL could practically be used in subsidy mode. A statutory cap on the size of the MIL in levy mode would minimise the risk of an indefinite accumulation of revenue from the instrument.

## **5.6 Which Act?**

We have not given any sustained consideration to the question of which Act an MIL should be established under. There would appear to be two main options: either an amendment to the Reserve Bank Act, consistent with the MIL's role as a supplementary monetary policy tool, or a totally separate piece of legislation. Given the responsibilities that would be imposed on a variety of institutions (Reserve Bank, Inland Revenue, LINZ) a standalone piece of legislation might be preferable.

## **6. Economic impact**

### **6.1 Macroeconomic Impact**

The MIL would represent an additional charge on all borrowings secured by residential mortgages. Such borrowings represent the majority of loans on the balance sheets of New Zealand financial institutions. However, once corporate bonds and (in particular) corporate borrowing from offshore is taken into account, they represent a minority of the total credit extended to the New Zealand economy and directly affected by New Zealand dollar interest rates. At present, using December 2005 figures, it is estimated that around 45 per cent of total NZD credit is likely to be secured (directly or indirectly) by a mortgage on a residential property. Even if we assume that the MIL could be designed and implemented in a way that kept to only moderate levels the extent to which financing was moved into forms beyond the reach of the MIL, it is probably not prudent to assume that the effective base for the MIL would be more than 40 per cent of total NZD credit.

That means that as a starting point, when thinking about the MIL as a substitute for further increases in the OCR, we must expect that the MIL would have to be set much higher than the amount of relief that could be expected on the OCR. Crudely, if (a) the effective MIL base was only 40 per cent of total NZD credit, and (b) demand for credit secured on residential mortgages was as interest-elastic as other forms of NZD

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<sup>5</sup> As one recent example, the total amplitude of the Federal Reserve's policy rate cycle this decade - in the aftermath of the tech-wreck etc, was 550 basis points in total, from high to low. Since the OCR was introduced in 1999, it has to date fluctuated only between 4.5 per cent and 7.25 per cent.

credit, a 125 basis point MIL would be equivalent to 50 basis points on the OCR. If, in the absence of the MIL, the Bank considered that a 50 point increase in the OCR was warranted, using the MIL instead would drive a 125 basis point wedge between borrowing costs for those using residential mortgages and all other borrowers.

We do not have models that enable us to reach very confident conclusions about the precise macroeconomic impact, and in particular modelling of the sectoral demand for credit (and hence responsiveness to changes in price) is rudimentary at best. However, a simple exercise has been undertaken using the Reserve Bank's FPS model, in which an MIL-equivalent is added to the interest rate facing consumers, but not to that facing firms deciding on real investment projects. In that experiment, a 150 basis point MIL imposed for a year allowed the 90 day rate (proxy for the OCR) to be around 70 basis points lower than otherwise, with an exchange rate around 1.75 per cent (or around one point on the TWI) lower than otherwise (all while keeping medium-term inflation consistent with the requirements of the Policy Targets Agreement). These results are, of course, only as good as the specification of the model itself. Modelling the exchange rate well is notoriously difficult. We would expect that if the MIL was successful, household spending would be weaker than otherwise, while business investment activity would be stronger than otherwise.

Once an MIL instrument was legislated, the chance that it could be used would be factored into market and household expectations. The instrument is intended to be used only in fairly exceptional circumstances, and it would not be intended to be used in each tightening or loosening cycle. It would also not be intended for use early in tightening or easing cycles, but only when pressures had, or were forecast with confidence to, become particularly intense (in terms of the statutory criteria outlined above). All this means that in early stages of most cycles, the existence of the MIL should have little effect on wholesale market pricing, in either the interest rate or foreign exchange markets.

However, as cyclical pressures intensified, and some of the statutory considerations relevant to the use of the MIL began to be met, media and markets would begin to debate, and consciously factor in, the possibility of the MIL being used. Other things being equal, this would (in levy mode) limit the extent of the increase in expected future wholesale interest rates, which would in turn be expected to dampen the exchange rate cycle a little.

Of course, the more responsive the exchange rate is to (actual and expected) interest rates, the less the scope the MIL provides for the OCR to be set lower than otherwise. This is because, if the exchange rate response was expected to be material, the Reserve Bank would have to factor into its assessment the reduced disinflationary pressures coming from the tradables sector. As noted earlier in this section, the Reserve Bank's best current judgement, captured in its forecasting model, is that the responsiveness of the exchange rate to lower expected wholesale rate would be moderate.

## **6.2 *Distributional Issues***

The following discussion assumes that the MIL can be used symmetrically. Over time, the distributional issues would be somewhat different if only the levy mode could be used (for various reasons, including the need to consider what other revenue source would be cut to offset the substantial revenues generated over time by the MIL). Periods of levy mode and subsidy mode might average out over a period of a couple of decades, so that the composition of affected groups would change materially through time.

A successful MIL would be one in which the amplitude of exchange rate cycles was dampened, if only a little. This would benefit direct participants in the tradables sector of the economy. These gains might be quite material if the distortions arising from exchange rates that had moved a long way away from medium-term fair value increased more than proportionally at some point (although there is little direct evidence of this of this sort of “tipping point”). Both extreme overvaluations and extreme undervaluations are costly, and risk distorting investment choices etc. New Zealand export producers are typically quite small and have few of the options for diversification that those in more industrialised countries may have. In principle, the household sector would also benefit from any reduction in the amplitude of exchange rate cycles; as employees, but also, for example, reducing the extent of periods when imports are much more expensive than is justified by longer-term fundamentals. Of course, the highly cyclical nature of the New Zealand exchange rate has become a well-recognised stylised fact, and both businesses and households already recognise that what goes up tends to go down.

The MIL is designed to increase the cost of finance secured on residential property in periods when the housing market is a particularly important source of pressure on demand. In substituting for an OCR increase, while covering only around 40 per cent of total NZD credit, the MIL has to increase housing finance costs by more than the OCR would otherwise have increased. On the other hand, other forms of NZD borrowing experience lower interest rates than they otherwise would. These effects are reversed when the MIL is used in subsidy mode.

The adverse impact is likely to be felt most heavily by those requiring high leverage and at the point of buying a first house (for whom the increase in financing costs is likely to be material, and who have the fewest alternative financing options). It should, however, be noted that the MIL (in levy mode) is likely to be used when house prices are themselves materially overvalued. In those circumstances, being encouraged to wait might well prove beneficial for first home buyers.

The MIL is applied to all residential mortgage finance, not just to new borrowers. In levy mode, the burden falls most heavily on those with existing fixed rate loans, who had contracted for a fixed rate and now face a discretionary levy added on top. On the other hand, fixed rate borrowers benefit most when the MIL is used in subsidy mode. These effects should not be overstated, however, as the possible use of the MIL will be anticipated and taken into account in wholesale market pricing (eg on interest rate swaps) that affects the pricing of fixed rate mortgages. There is no doubt, however, that those with fixed rate mortgages would face additional uncertainty.

The other main group exposed to the MIL is the small business borrowers using their homes as collateral to finance business activities. Estimates are that perhaps 10-15

per cent of total residential mortgage credit may be of this form. The MIL (levy mode) would be imposed in periods when housing market pressures were particularly intense and pressures in the business sector as a whole were less intense. Of course, the housing sector will rarely be booming while business, as a whole, is very weak, but nonetheless small businesses would face the additional costs of credit, in a way that their larger competitors (borrowing unsecured or secured on other assets would not). On the other hand, the MIL in subsidy mode would advantage this class of small business borrowers relative to their larger competitors in periods when the housing market was very weak.

In periods when the MIL is used in levy mode, returns to financial savers (here and abroad) would be lower than otherwise (because the MIL would be substituting for the OCR to some extent). For savers as a group, these losses would be offset by the gains when the MIL was used in subsidy mode (when the OCR would not be cut as much as it otherwise would be). Reduced variability in real returns to savers might be advantageous, by reducing uncertainty about future income flows. Given that the available evidence suggests that domestic savings are not strongly sensitive to changes in interest rates, the muted OCR cycle would be unlikely to materially alter the supply of domestic savings at any point in the cycle.

Any measure which affects the housing market is likely to affect the rental market as well. These effects have not been assessed in any depth, but would be likely to be of secondary significance. Reduced variability in house prices might, at the margin, reduce rental variability and hence uncertainty about future outgoings.

### **6.3 Efficiency Costs**

If the MIL was used, whether in levy or subsidy mode, only in the sorts of exceptional circumstances outlined above, the overall efficiency costs would appear unlikely to be large. The MIL would be imposed only in periods when large, and potentially costly, imbalances were already apparent in the economy.

Any control or levy creates incentives for avoidance activities, and these activities themselves consume real resources. The scope for avoidance activity around the MIL should not be underestimated. Nonetheless, as the SSI Report noted, the price-based nature of the instrument, and the fact that it is expected to be used only perhaps a couple of years every decade, suggests that these costs, in aggregate, are likely to be only moderate.

## **7. Perceptions of the policy framework**

There is no direct international precedent for an instrument such as the MIL. Moreover, New Zealand's monetary policy regime, including its governance features, has been highly regarded internationally. In that light, it is important to consider what impact the addition of the MIL to the toolkit might have on international perceptions of New Zealand.

It is difficult to know the answers to this with any confidence. Our provisional judgement is that any tangible adverse impact would be likely to be very limited, although much would depend on how the instrument was actually used through time, and how effectively it was implemented – if the levy proved able to be readily avoided, it would also become quite quickly discredited. The transition to a new instrument, particularly one used only intermittently, inevitably involves some reputational risks, as the government agencies involved and parties involved in the private sector come to grips with the use of the new tool.

By design, the instrument would be intended as a supplementary instrument for rare use in periods of exceptional combinations of pressure on demand and the exchange rate. Investors and commentators generally recognise the extremely uncomfortable position those sorts of pressure place on a central bank and an economy. Moreover, the model outlined here leaves the leading role in recommending the use of the MIL to the autonomous Reserve Bank, and does not allow it to be used when the Reserve Bank has not recommended its use.

Finally, although there is little direct precedent for the MIL, a variety of countries have sought to use various supplementary tax or control-based measures to mitigate particularly intense pressures. When these measures have been mishandled, there has been some cost to the country in question, but in general there is no obvious evidence (in interest rate risk premia for examples) that supplementary measures lead to material adverse market consequences for the countries that have experimented with them.

It has been noted that a successful MIL might reduce investors' perceptions of risk around NZ dollar investments, perhaps increasing the supply of capital to the New Zealand economy. Given that the MIL would be used only in exceptional circumstances, would not be expected to alter the (high) short-term volatility of the New Zealand dollar, and would be likely to dampen cycle amplitudes only a little, this sort of paradoxical result also appears unlikely.

## **8. Implementation issues**

There are three broad classes of implementation issues. These have not yet been explored in detail.

The first is the time it would take from the point where a decision was made to proceed with an MIL to the enacting of the relevant legislation. As new type of instrument, without direct precedent elsewhere, it would seem unlikely that these processes could be completed in less than nine months, although to some extent this would depend on the priority that was accorded to the development and implementation of an MIL.

The second is the considerable time it would take for IRD, as the administering agency, and lenders to be in a position to collect the levy. Although there could be some overlap with the legislative period, lenders would probably not engage in detailed preparations until at least the completion of the select committee process, or a

point at which it was clear that the operational details (precise base definitions and exact methods of calculation) were certain.

The third set of issues is the appropriate lag between a decision to adjust the MIL, once it was in place, and the date from which such a change should take effect. Banks are able to change variable mortgage interest rates very quickly suggesting that there should be no need for a technical lag of more than a few days at the most. However, as the MIL would also apply to all fixed rate residential mortgages (ie to borrowers who had contracted for fixed house finance outgoings), it might be prudent to have MIL adjustments take place say one month after the adjustment was gazetted. Expectations and confidence effects could, of course, still be expected to be immediate; only the cash-flow effects would take a little time to bite.

## **9. Conclusion**

This report outlines our progress in fleshing out the details of an operational model for a mortgage interest levy. Such a levy would be designed to assist in overall demand management, by introducing a wedge between costs to domestic mortgage borrowers and returns to foreign savers in those periods when the gap between New Zealand and foreign interest rates is unusually large. An MIL could, in principle, provide useful support for monetary policy, but there are significant practical operational and distributional issues around such an instrument. Work on this project was terminated sooner than had originally been envisaged, so that in some respects this report has the character of work in progress. A number of issues would need to be examined in more depth before an operational recommendation could be put forward.

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